Jessica R. Cauchard (May, 2023)

CURRICULUM VITAE

Personal Details

Jessica R. Cauchard

Ben Gurion University of the Negev,

Department of Industrial Engineering and Management,

Beer Sheva 84105

email: jcauchard@bgu.ac.il

ORCID iD: 0000-0002-8916-8787

Education

B.Sc. - 2002-2005. Université Paul Sabatier Toulouse III, France Mathematics and Informatics, specialization in Engineering.

M.Sc. - 2005-2006. University of Sheffield, UK

Department of Computer Science

Name of advisor: Dr. Daniela Romano

Title of thesis: Design and Development of a Viewing Software for a Synchronised

Experience in Virtual and Real museums

Ph.D. - 2009-2013. University of Bristol, UK

Department of Computer Science

Name of advisors: Prof. Sriram Subramanian and Prof. Mike Fraser

Title of thesis: Towards Mobile Multi-Display Environments: A Design Exploration

Using Projection-Screen Devices

Postdoc - 2014-2016. Stanford University & Cornell Tech, CA, USA Department of Computer Science. Name of advisor: Prof. James Landay Human-Computer Interaction research in ubiquitous and mobile computing. Initiated research agenda on human-drone interaction.

Employment History

Since March 2019. Lecturer (tenure track) - Ben Gurion University of the Negev

2017-2019. Senior Lecturer (tenure track) - IDC Herzliya, Israel

2014-2016. Post-doctoral Fellow - Stanford University, Computer Science, USA

2014. Post-doctoral Fellow - Cornell Tech, Computer Science, USA

2012-2013. Instructor - CESI-EXIA, France

2009-2013. Graduate Researcher - Bristol University, Bristol, UK

2012. Research Intern - Microsoft Research Asia, China

2007-2009. Researcher - Think Lab, Salford University, UK

2006-2007. Research Associate (Knowledge Transfer Partnership Program)

Tribal Group and University of Sheffield, UK

Professional Activities

(a) Positions in academic administration

Since 2019. Founder and director of the Magic Lab, Lecturer (Tenure Track), Dept. of Industrial Engineering and Management, Ben Gurion University of the Negev, Israel.

2017-2019. Founder and director of the USLab, Faculty member, Schools of Computer Science and Communication, IDC Herzliya, Israel.

(b) <u>Professional functions outside universities/institutions</u>

2023, Visiting professor, LAAS, Toulouse, France

2022 & 2023, Visiting professor, ENAC, Toulouse, France

2022, ESA Astronaut Candidate

Since 2022, ISS Steering Committee Member

Since 2021, Vice Chair, ACM SIGHI Tel Aviv Chapter

2019-2022, Member and Vice Chair since 2022, MobileHCI Steering Committee

(c) <u>International conference organization</u>

The organization of these conferences are based on bids submitted to the steering committee. Upon approval, they correspond to one to two years of organizational work.

2023. Student Design Competition Chair, ACM CHI, Germany.

2021. General Chair, ACM MobileHCI, France & online. 200 attendees across 27 countries. Program included 50 research papers, peer-reviewed demos and posters, workshops, doctoral consortium, and keynote talks.

2019. Doctoral Consortium Chair, ACM MobileHCI, Taiwan. 10 students & faculty

2018. Demonstrations Chair, ACM CHI, Canada. Special event for 50th anniversary of Doug Englebart's Mother of all Demos. 3200 attendees and 77 accepted demos

2018. Workshop Chair, ACM MobileHCI, Spain. 7 workshops and 50 attendees

2015-2016. Registration Chair, ACM UIST, USA & Japan. 350 and 650 attendees

2015. Panel Chair, ACM womENcourage, Sweden. 3 panels and 180 attendees

2012. Student Volunteer Chair, ACM MobileHCI. 16 SVs and 280 attendees

(d) Workshop organization

These workshops are peer-reviewed and accepted based on academic merit. Upon acceptance, the organizers are responsible for the scientific content as well as the organization of the event. Workshops typically count between 10 and 50 participants.

2014. It doesn't have to be pink! Designing for women. Birds of a Feather. Grace Hopper Conference. Phoenix, AZ, USA. **Cauchard J.R.**, Kivran-Swaine F., Esper S. and Kliper Y. (est. 200+ attendees)

2015. Future Mobile User Interfaces. MobiSys 2015: 13th International Conference on Mobile Systems, Applications, and Services. Florence, Italy. **Cauchard J.R.**, Landay J.A. and Li Y.

2018. ACM Summer School on Intelligent User Interfaces in the Era of IoT and Smart Environments. Haifa, Israel. Kuflik T., Zamansky A. and Cauchard J.R.

2018. Multi-Cultural Human-Robot Interaction Workshop. ACM AfriCHI 2018: 2nd African conference for Human-Computer Interaction. Windhoek, Namibia. Cauchard J.R. and Wojciechowska A.

2019. The Challenges of Working on Social Robots that Collaborate with People. ACM CHI Conference on Human Factors in Computing Systems. Glasgow, Scotland. Baillie L, Breazeal C., Denman P., Foster M.E., Fischer K., and Cauchard J.R.

2019. iHDI: International workshop on Human-Drone Interaction. At ACM CHI Conference on Human Factors in Computing Systems. Glasgow, Scotland. Brock A., Cauchard J., Funk M., Garcia J., Khamis M. and Kljun M.

2020. Designing Safety Critical Interactions: Hunting Down Human Error. ACM CHI Conference on Human Factors in Computing Systems. Honolulu, HI, USA. Boll S., Palanque P., Mirnig A., Cauchard J., Lützhöft M. and Feary M.

2020. Multi-Cultural Human-Drone Interaction Workshop. PDC: 16th Participatory Design Conference. Manizales, Colombia. Cauchard J.R., Wojciechowska A. and Lucero A.

(e) Significant professional consulting

2020-2022, European Union Horizon 2020, Monitor. RIA project. Secure societies - Protecting freedom and security of Europe and its citizens. Security. Technologies for first responders (SU-DRS02). INGENIOUS, INTREPID and SIXTHSENSE projects.

2021-2019-2018, French National Research Agency (ANR), Evaluator of Project Proposals.

2020, European Union Horizon 2020, Evaluator of Project Proposals: RIA. Secure societies - Protecting freedom and security of Europe and its citizens. Security. Technologies for first responders (SU-DRS02-2018-2019-2020).

2020, Canada Foundation for Innovation (CFI), Evaluator of Project Proposals.

2019, European Union Horizon 2020, Evaluator of Project Proposals: Framework Programme for Research and Innovation, Innovative applications of drones for ensuring safety in transport (MG-2-8-2019).

2016, Consultant, Eonite, USA. User Experience and Interface design development on head-mounted displays for augmented and virtual reality applications.

(f) Editor or member of editorial board of scientific journal or conference Journals

- MDPI Multimodal Technologies and Interaction journal Springer Special issue on Interactions with Autonomous Vehicles, 2022, Guest Editor
- Springer Personal and Ubiquitous Computing journal Special edition on Pervasive Computing, 2021, Guest Editor
- PACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT), 2018-2020, Associate Editor

Program Committee Chair

- ACM CHI: Blending Interaction committee Sub-committee chair, 2022-2023
- Israeli Human-Computer Interaction Conference (IsraHCI), 2018 & 2022
- ACM Conference on Mobile and Ubiquitous Multimedia (MUM), 2020
- ACM International Symposium on Pervasive Displays (PerDis), 2019

Program Committee Member

- ACM SIGGRAPH Conference on Computer Graphics and Interactive Techniques in Asia. Real-Time Live! 2021, Committee member
- ACM Conference on Human Factors in Computing Systems (CHI) Associate Chair for several subcommittees between 2016 and 2021 (exc. 2019)
- ACM CHI Workshops, 2019
- Grace Hopper Conference (GHC), Human-Computer Interaction Track, 2017-2018
- ACM Conference on Human-Computer Interaction with Mobile Devices and Services (MobileHCI), 2016
- ACM SIGCHI Symposium on Engineering Interactive Computing Systems (EICS), 2015
- ACM CHI Work-in-Progress, 2013-2015

(g) Ad-hoc reviewer for journals and peer-reviewed conferences

ACM Transactions on Computer-Human Interaction (TOCHI) journal, 2023

ACM Conference on Designing Interactive Systems (DIS), 2016 & 2021

Israeli Human-Computer Interaction Research Conference (IsraHCI), 2020

ACM User Interface Software and Technology (UIST), 2014-2019

SIGGRAPH ASIA Emerging Technologies, 2019

ACM Conference on Human Factors in Computing Systems (CHI), 2012-2016, 2019

International Conference on Human-Computer Interaction (RoCHI), 2019

Conférence Francophone sur l'Interaction Homme-Machine (IHM), 2019

International Journal of Social Robotics (SORO), 2019

International Journal of Human-Computer Interaction (IJCHI), 2019

ACM Transactions on Human-Robot Interaction (THRI), 2018-2019

IEEE Robotics and Automation Letters (RA-L), 2018

IEEE International Conference on Robotics and Automation (ICRA), 2018

ACM Conference on Human-Computer Interaction with Mobile Devices and Services (MobileHCI), 2012-2014-2018

Conference on Human-Agent Interaction (HAI), 2017

IEEE/RSJ International Conference on Intelligent Robots and Systems, 2017

ACM/IEEE Conference on Human-Robot Interaction (HRI), 2017

IEEE Pervasive Computing, 2016

IEEE Symp. on Robot and Human Interactive Communication (RO-MAN), 2016

ACM International Symposium on Wearable Computers (ISWC), 2015

ACM Conference on Intelligent User Interfaces (IUI), 2015

ACM Symposium on Spatial User Interactions (SUI), 2013

IEEE Symposium on 3D User Interfaces (3DUI), 2013

ACM Conference on Interactive Tabletops and Surfaces (ITS), 2012

ACM Conference on Multimodal Interaction (ICMI), 2012

ACM Conference on Tangible, embedded, and embodied interaction (TEI), 2012

ACM Ubiquitous Computing (UbiComp), 2011

(h) Membership in professional/scientific societies

Since 2014, Association for Computing Machinery (ACM) - Professional Member Since 2021, Institute of Electrical and Electronics Engineers (IEEE) - Member

Educational activities

(a) Courses taught

Ben Gurion University of the Negev

- Human-Computer Interaction for Mobile Application (364–1–1201) International course with University of Primorska, Slovenia. IEM & CS undergraduates. Since 2021.
- Application Design for Mobile Devices (364–1–1201) IEM undergraduates. 2019 & 2020.
- Human-Computer Interaction (364–1–1711) IEM undergraduates. Since 2019.
- Designing User Interfaces: Advanced Topics in HCI (364–2–1111) Engineering graduates. Since 2019.

IDC Herzliya

- Systems Programming in C (CS 3144) CS 1st year undergraduates. 2017-2018.
- Human-Computer Interaction (CS 3154) CS undergraduates. 2017-2019.
- Human-Computer Interaction Techniques (COM 7629), COM undergraduates. 2017-2018.
- Human-Machine Interaction Seminar (CS 3602), CS graduates. 2018-2019.

Stanford University

- HCI introductory course, visiting students. 2016.

CESI-EXIA

- Scientific Project, CS 1st year undergraduates. 2012-2013.
- Mobile Development & Augmented Reality, CS M.Sc. 2012-2013.
- Research Methodologies, CS M.Sc. 2012-2013.

(b) Graduate research students

University of Bristol

- Teng Han, M.Sc. (CS), 2009-2012, co-advised with Sriram Subramanian. Image processing (OpenCV) for gestural interaction with mobile devices. Led to publication in PUC journal (2012).

Stanford University

- Eric Wang, M.Sc. (CS), 2015, National Taiwan University advisor: Mike Chen and Bing-Yu Chen, visiting student at Stanford University, co-advised with James Landay. Implemented input and output system embedded on a drone for human-drone interaction. Led to publication at HRI '19.
- Kesler Tanner, Ph.D. (CS), 2015, Stanford University, co-advised with James Landay. Implemented muscle interface on a Myo armband.
- Evan Strasnick, Ph.D. candidate (CS), 2016, Stanford University, co-advised with James Landay. Spatial resolution of haptic sensations. Led to publication at CHI '17.
- Jane E, Ph.D. candidate (CS), 2014-2016, Stanford University, co-advised with James Landay. Natural human-drone interaction and Guide Drones. Led to publication at Ubicomp '15 and CHI '17 and to Magic Grant Award.
- Krister Johnson, M.Sc. (SC), Summer 2016, Stanford University, co-advised with James Landay. iOS and Pebble software for multi-modal step counter study.

IDC Herzliya

- Jeremy Frey, Postdoctoral Fellow, 2017-2018, IDC Herzliya. Physiological computing. Led to publications at ACM CHI 2018 & 2020, IMWUT, as well as demos and workshop papers at CHI and Ubicomp.
- Jeff Blum, Ph.D. candidate (EE), Summer 2018, McGill University, Canada advisor: Jeremy Cooperstock, visiting student at IDC Herzliya. Haptic interface for remote implicit communication. Led to workshop at Ubicomp '18 and paper at IEEE Haptics Symposium 2020.
- Chloe Benmussa, M.Sc. (CS), 2019-2022. Co-advised with Zohar Yakhini. Interactive physiologically-driven diving suit. Let to publication at Sensors.

Ben Gurion University of the Negev

Ph.D.

- Viviane Herdel, Ph.D. student (IEM) Start Oct 2020. Co-supervised with Yisrael Parmet. Emotion Elicitation, Capture, and Influences in Human-Drone Interaction
- Ori Fartook, Ph.D. student (IEM) Start Oct 2020. Co-supervised with Tal Oron Gilad. Emotional support in human-drone interaction.

M.Sc.

- Itay Ridel, M.Sc. (IEM) Graduated in 2020. Virtual reality-based visualization for cyber-security analysts, in collaboration with IBM.
- Omri Alon, M.Sc. (IEM) Graduated in 2021. Human-Drone Interaction in Firefighting, in collaboration with RAFAEL.

- Carmel Shavitt, M.Sc. (IEM) Graduated in 2022. Multi-user interaction.
- Michal Hershkovitz, M.Sc. Project (IEM) 2022. Physiological signals for emotion detection.
- Woody Gover, M.Sc. (IEM) Graduated in 2022. Role of anthropomorphism in people's perception of drones. Co-advisor: E. Sharlin, Calgary University, Canada.
- Lee Yamin, M.Sc. (IEM) Graduated in 2022. Models of drones' perception.
- Eyal Ginosar, M.Sc. (IEM) Graduated in 2022. Human-Drone Interaction with injured people.
- Amir Lorch, M.Sc. (IEM) Graduated in 2022. Augmented mirror for health and behavior change.
- Tsvi Ben Chimol, M.Sc. (IEM) Since 2020 (Part-time). Interaction with drone swarms.

Ph.D. and M.Sc. Visitors and External Students

- Anastasia Kuzminykh, Ph.D. (CS), University of Waterloo, Advisor: Ed Lank. Visiting student at BGU in 2020. Research on ownership with autonomous devices. Led to papers at PACM HCI 2021, CHI '21 and Late Breaking Work at CHI '20.
- Viviane Herdel, M.Sc. (Psychology), Graduated in 2020 (Honors). Visiting student at BGU for her thesis. Co-advised with Andrea Hildebrandt, Oldenburg University, Germany. Topic: Human reaction to facial features on drones. Led to paper at CHI '21.
- Anna Wojciechowska, M.Sc. (CS), Graduated in 2021 (A). Co-advised with Louise Barkhuus, ITU Copenhagen, Denmark. Topic: Crosscultural drone design workshop: co-designing human-drone interaction.
- Stephanie Furlan, M.Sc. (CS), Graduated in 2021. Co-advised with Matjaž Kljun and Klen Čopič Pucihar, University of Primorska, Slovenia. Topic: Towards a pleasurable human-drone interaction: the review of interaction techniques and drones' characteristics.
- Zachary McKendrick, Ph.D. (CS), University of Calgary, Canada. Advisors: Patrick Finn & Ehud Sharlin. Visiting student at BGU in 2022 (MITACS). Research on theatrical applications for drones.
- Jordan Deja, Ph.D. (CS), University of Primorska, Slovenia. Advisors: Matjaž Kljun and Klen Čopič Pucihar. Visiting student at BGU in 2022 (ERASMUS+). Research on interaction with drone swarms.
- Charles Duteau, M.Sc. (CS), ENAC & LAAS, France. Co-advised with: Anke Brock, Simon Lacroix and Daniel Sidobre. Topic: Acceptable Close-Body Interaction with a Co-Working Drone.

(c) Undergraduate research students

Stanford University

- Alex Tamkin, B.Sc. (CS), 2015, co-advised with James Landay. Implemented input and output system embedded on a drone for human-drone interaction. Led to publication at HRI '19.
- Janette Cheng, B.Sc. (CS), Summer 2015, co-advised with James Landay. Implemented iOS software and helped run longitudinal study on feedback on wearable devices. Led to publication at CHI '16.
- Kat Gregory, Jessica Zhao, Edwin Park, B.Sc. (CS), Summer 2015, co-advised with James Landay. Implemented iOS and Pebble smartwatch software for ActiVibe.
- Kevin Zhai, B.Sc. (CS), 2015-2016, Stanford University, co-advised with James Landay. Feedback for human-drone interaction. Led to publication at HRI '16.
- Michelle Park, Amy Chen, Tommy Fang, B.Sc. (CS), Summer 2016, Stanford University, co-advised with James Landay. Automated drone tour guide. Led to publication at HRI '19.

IDC Herzliya

- Roi Kimche, Boaz Shalom, Alon Slutsky, Etai Zajonts. B.Sc. (CS), Spring 2017. Implemented and performed drone demonstration for IDC Gala 2017.
- Stav Shimko, B.Sc. (CS), Summer 2017. Autonomous Drone programming.
- Yotam Avraham, B.Sc. (CS), Fall 2017. Development of a platform for biofeedback processing.
- May Grabli, B.Sc. (Communications), 2017-2018. User study and creative for interactive storytelling and biofeedback projects. Led to publication at CHI '20.
- Kohava Altose, B.Sc. (Communications), 2017-2018. User study design for interactive storytelling project.
- Adam Ben Hanania, Joshua Goldberg, B.Sc. (Communications), 2017-2018. Feedback for natural interactions with multi-user devices. Led to poster at MUM'18.
- Rafael Ben Ari, Alon Rabinovich, B.Sc. (CS), 2017-2018. Autonomous flight path for search and rescue drone.
- Sarit Sass, Roy Shafir, B.Sc. (CS), 2017-2018. Drone approach project on indoor drone. Led to publication at HRI '19.
- Jacqueline Eichenblatt, B.Sc. (Business Administration) & Chloe Benmussa, B.Sc. (CS), 2017-2018. Interactive space suit project.
- Anna Wojciechowska, Esther Mandelblum, B.Sc. (Communications), 2017-2019. Drone perception. Led to publication at HRI '19 and IMWUT '19.
- Gilad Ostrin, B.Sc. (CS), 2018. Development of a platform for interactive storytelling and biofeedback processing. Led to publication at CHI '20.

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- Eyal Ginosar, Research Assistant, 2023. Human-Drone interaction with bystanders.

- Anna Wojciechowska, Research Assistant, 2019. Perception of drones across cultures. Led to publication at ACM DIS 2020.
- Gilad Ostrin, Programmer, 2019. Big Data visualization in Virtual Reality in partnership with IBM.
- Ofek Ben-Ezry, Shakked Goldstein, B.Sc. (IEM), 2020. Final year project. Gesture recognition from a drone in search and rescue.
- Yuval Wartelsky, Dana Friedman, B.Sc. (IEM), 2020. Final year project. Sensing willingness to interact in drone-initiated communication.
- Asaf Khabie, Barak Loebenstein, B.Sc. (IEM), 2020. Final year project. Drone Search and Rescue: Finding people and handing over supplies.
- Lee Yamin, B.Sc. (IEM), 2020. Final year project. Web platform for drone perception analysis.
- Pelleg Namdar, Roni Dayagi, B.Sc. (IEM), 2021. Final year project. Menu navigation on a drone's screen.
- Itzik Lusky, B.Sc. (IEM), 2021. Final year project. Spatial interaction with a map on a drone's screen.
- Yosef Cohen, Ofir Avigad, B.Sc. (IEM), 2021. Final year project. Defining characteristics for voice user interface on drones.
- Jonathan Lahat, Alon Karmona, Roy Yogev, B.Sc. (IEM), 2021. Final year project. Dataset of people's reactions to drone's encounter.
- Shay Bloch, B.Sc. (IEM), 2021-2022. Final year project. Natural feedback strategies for human-drone teaming.
- Shir Menashe, B.Sc. (IEM), 2021-2022. Final year project. Comparison of 2D and 3D visualization tool for cybersecurity data.
- Noa Butbul, B.Sc. (IEM), 2021-2022. Final year project.
- Dan Ben-Dor, Etay Bouchnik, Yossi Aziza, B.Sc. (IEM), 2021-2022. Final year project.
- Ofir Schwartz, Roei Sagir, B.Sc. (IEM), 2021-2022. Final year project.
- Amir Tocker, Liran Man, B.Sc. (IS), 2021-2022. Final year project.
- Nufar Dvir, Roman Kegen, B.Sc. (IEM), 2021-2022. Final year project. Coadvised with Prof. Oron-Gilad.
- Saar Weis, B.Sc. (IEM), 2021-2022. Final year project. Co-advised with Prof. Oron-Gilad.

Awards, Citations, Honors, Fellowships

- (a) <u>Honors, Citation Awards</u>
- 2015, Heidelberg Laureate Forum, Invitation to attend.
- 2012, Google Anita Borg Memorial, Finalist EMEA.
- 2012, British Federation of Women Graduates, Marjorie Shaw Scholarship: Awarded for academic excellence.

(b) <u>Fellowships</u>

2015, N2 Women Young Researcher Fellowship, travel grant.

2014, Anita Borg Grace Hopper, travel grant for GHC.

2013, ACM-Women Scholarship, travel grant.

2009-2012, EPSRC: UK Engineering and Physical Sciences Research Council, Fully funded PhD Studentship (Tuition waiver + \$60K).

2010 & 2011, Bristol University Department of Computer Science, Roberts Fund for Skills Training, travel grant.

2010, Royal Academy of Engineering, travel grant.

Scientific Publications

H-index: 16 (GS); 10 (ISI) - Retrieved: April 14th, 2023 Total number of citations of all articles: 1240 (GS); 769 (ISI)

In the field of HCI, conference publications are particularly important. The largest and most prestigious international conference is the ACM Conference on Human Factors in Computing Systems (CHI). Since SJR does not have a reliable ranking for HCI, the rankings for conferences are established using the Computing Research & Education Ranking (CORE) portal (core.edu.au) which is a reference for the field of computer science. A* conferences are considered as exceptional publication venues, A as excellent, and B as good conferences. The descriptions of each rank are available on the CORE website. The list of top publication venues is also available in Google Scholar at: https://bit.ly/HCIpublications

(a) Editorship of collective volumes

- 1. **Cauchard^{PI}**, **J.R.**, Gentile^{PI}, V., Khamis^{PI}, M., and Sorce^{PI}, S. 2021. Special issue on pervasive displays. Personal and Ubiquitous Computing Journal. (IF: 3.006, Ranking Q2 Computer Science, Information Systems)
- 2. **Cauchard^{PI}, J.R.**, Jarke^{PI}, M., and Oliver^{PI}, N. 2022. Europe Special Section. Communications of the ACM. 03/2022. 65(4).
- 3. Hoggenmueller^S, M., Tomitsch^{PI}, M., Cauchard^{PI}, J.R., Hespanhol^{PI}, L., Lupetti^{PI}, M.L., Schroeter^{PI}, R., Yavo-Ayalon^{PI}, S., Wiethoff^{PI}, A., and Worrall^{PI}, S. To appear Q2 2023. Interaction Design and the Automated City Emerging Urban Interfaces, Prototyping Approaches and Design Methods. Multimodal Technologies and Interaction Journal.

(b) Peer-Reviewed conference proceedings

- 1. **Cauchard^S, J.R.**, Ainsworth^{PI}, P.F., Romano^{PI}, D.M., and Banks^C, B. 2006. Virtual Manuscripts for an Enhanced Museum and Web Experience "Living Manuscripts". In Proc. of the 12th International Conference on Virtual Systems and Multimedia (VSMM'06), Xi'an, China. (Number of citations: 7, Ranking: B)
- 2. Cauchard^S, J.R., Löchtefeld^S, M., Irani^C, P., Schoening^C, J., Krüger^{PI}, A., Fraser^{PI}, M., and Subramanian^{PI}, S. 2011. Visual Separation in Mobile Multi-Display Environments. In Proceedings of the 2012 ACM Symposium on User interface Software and Technology (UIST'11). Santa Barbara, CA, USA. (Number of citations: 62, Acceptance Rate: 25%, Ranking: A*)

- 3. **Cauchard**^S, **J.R.**, Löchtefeld^S, M., Krüger^{PI}, A., Fraser^{PI}, M., and Subramanian^{PI}, S. 2012. m+pSpaces: Virtual workspaces in the spatially-aware mobile environment. In Proceedings of the 2012 ACM Conference on Human-Computer Interaction with Mobile Devices and Services (MobileHCI'12). San Francisco, CA, USA. (Number of citations: 16, Acceptance Rate: 25%, Ranking: B)
- 4. Cauchard PD, J.R., ES, J.L., ZhaiS, K.Y. and Landay I, J.A. 2015. Drone & Me: An Exploration Into Natural Human-Drone Interaction. In Proceedings of the 2015 ACM International Joint Conference on Pervasive and Ubiquitous Computing (Ubicomp'15). Osaka, Japan.

 (Number of citations: 285, Acceptance Rate: 24%, Ranking: A*)
- 5. Cauchard^{PD}, J.R., Zhai^S, K.Y., Spadafora^S M. and Landay^{PI}, J.A. 2016. Emotion Encoding in Human-Drone Interaction. In Proceedings of the 2016 ACM/IEEE International Conference on Human-Robot Interaction (HRI '16). Christchurch, New Zealand.

 (Number of citations: 163, Acceptance Rate: 25%, Ranking: A)
- 6. Cauchard PD, J.R., Cheng J., Pietrzak T. and Landay I, J.A. 2016. ActiVibe: Design and Evaluation of Vibrations for Progress Monitoring. In Proceedings of the 2016 ACM Annual Conference on Human Factors in Computing Systems (CHI'16). San Jose, CA, USA.

 (Number of citations: 70, Acceptance Rate: 23%, Ranking: A*)
- 7. E^S, J., E^S, I., Landay^C, J.A. and **Cauchard^{PI}**, **J.R.** 2017. Drone & 我: Cultural Influences on Human-Drone Interaction Techniques. In Proceedings of the 2017 ACM Annual Conference on Human Factors in Computing Systems (CHI'17). Boulder, CO, USA.

 (Number of citations: 76, Acceptance Rate: 25%, Ranking: A*)
- 8. Strasnick^S, E., Cauchard^{PD}, J.R. and Landay^{PI}, J.A. 2017. BrushTouch: Exploring an Alternative Tactile Method for Wearable Haptics. In Proceedings of the 2017 ACM Annual Conference on Human Factors in Computing Systems (CHI'17). Boulder, CO, USA. (Number of citations: 24, Acceptance Rate: 25%, Ranking: A*)
- 9. Frey J., Grabli^S, M., Slyper^C, R. and **Cauchard^{PI}**, **J.R.** 2018. Breeze: Sharing Biofeedback Through Wearable Technologies. In Proceedings of the 2018 ACM Annual Conference on Human Factors in Computing Systems (CHI'18). Montreal, Canada.

 (Number of citations: 84, Acceptance Rate: 26%, Ranking: A*)
- 10. Brock^{PI}, A., Chatain^S, J., Hachet^C, M., Landay^C, J.A. and **Cauchard**^{PI}, **J.R.** 2018. FlyMap: Interacting with Maps Projected from a Drone. In Proceedings of the 7th ACM International Symposium on Pervasive Displays (PerDis'18). Munich, Germany. (Number of citations: 56, Ranking: B)
- 11. Wojciechowska^S, A., Frey^{PD}, J., Sass^S, S., Shafir^S, R. and **Cauchard^{PI}**, **J.R.** 2019. Collocated Human-Drone Interaction: Methodology and Approach Strategy. In Proceedings of the 14th annual IEEE/ACM International Conference on Human-Robot Interaction (HRI'19). Daegu, South Korea. (Number of citations: 42, Acceptance Rate: 24%, Ranking: A)
- 12. **Cauchard**^{PD}, **J.R.**, Tamkin^S, A., Wang^S, C.Y., Vink^S, L., Park^S, M., Fang^S, T. and Landay^{PI}, J.A. 2019. drone.io: Gestural & Visual Interface for Human-Drone Interaction. In Proceedings of the 14th annual IEEE/ACM

- International Conference on Human-Robot Interaction (HRI'19). Daegu, South Korea. (Number of citations: 44, Acceptance Rate: 24%, Ranking: A)
- 13. Frey^{PD}, J., Ostrin^S, G., Grabli^S, M., and **Cauchard**^{PI}, **J.R.** 2020. Physiologically-Driven Storytelling: Concept and Software Tool. In Proc. of the 2020 ACM Annual Conference on Human Factors in Computing Systems (CHI'20). Honorable Mention Award (Top 5%)
 (Number of citations: 6, Acceptance Rate: 24%, Ranking: A*)
- 14. Blum^S, J., Cauchard^{PI}, J.R., and Cooperstock^{PI}, J. 2020. Habituation to Pseudo-Ambient Vibrotactile Patterns for Remote Awareness. In Proc of the IEEE Haptics Symposium (HAPTICS) (Number of citations: 3, Acceptance Rate: 48%, Ranking: B)
- 15. Wojciechowska^S, A., Hamidi^C, F., Lucero^C, A. and **Cauchard**^{PI}, **J.R.**Chasing Lions: Co-Designing Human-Drone Interaction in Sub-Saharan Africa. In Proc of the 2020 ACM conference on Designing Interactive Systems (DIS '20) (Number of citations: 7, Acceptance Rate: 24%, Ranking: A)
- 16. Herdel^S, V., Kuzminykh^S, A., Hildebrandt^{PI}, A., and **Cauchard^{PI}**, **J.R.** Drone in Love: Emotional Perception of Facial Expressions on Drones. In Proc. of the 2021 ACM Annual Conference on Human Factors in Computing Systems (CHI'21) (Number of citations: 17, Acceptance Rate: 26%, Ranking: A*)
- 17. Alon^S, O., Rabinovich^C, S., Fyodorov^C, A., and **Cauchard**^{PI}, **J.R.** Drones in Firefighting: A User-Centered Design Perspective. In Proc. of the 2021 ACM Conference on Mobile Human-Computer Interaction (MobileHCI'21) (Number of citations: 8, Acceptance Rate: 33%, Ranking: B)
- 18. Herdel^S, V., Yamin^S, L.J., Ginosar^S, E., and **Cauchard**^{PI}, **J.R.** Public Drone: Attitude towards Drone Capabilities in Various Contexts. In Proc. of the 2021 ACM Conference on Mobile Human-Computer Interaction (MobileHCI'21) (Number of citations: 7, Acceptance Rate: 33%, Ranking:B)
- 19. Auda^S, J., Weigel^C, M., Cauchard^{PI}, J.R., and Schneegaβ^{PI}, A. Understanding Drone Landing on the Human Body. In Proc. of the 2021 ACM Conference on Mobile Human-Computer Interaction (MobileHCI'21) (Number of citations: 4, Acceptance Rate: 33%, Ranking: B)
- 20. **Cauchard**^{PI}, **J.R.**, Gover^S W., Chen^S W., Cartwright^S, S. and Sharlin ^{PI}, E. Drones in Wonderland Disentangling Collocated Interaction Using Radical Form. IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS'21) (Number of citations: 2, Acceptance Rate: 45%, Ranking: A)
- 21. Herdel^S, V., Yamin^S, L., and **Cauchard**^{PI}, **J.R.** Above and Beyond: A Scoping Review of Domains and Applications for Human-Drone Interaction. In Proc. of the 2022 ACM Annual Conference on Human Factors in Computing Systems (CHI '22) Honorable Mention Award (Top 5%) (Number of citations: 6, Acceptance Rate: 25%, Ranking: A*)
- 22. Ginosar^S, E. and **Cauchard**^{PI}, **J.R.** At First Light: Expressive Lights in support of Drone-Initiated Communication. In Proc. of the 2023 ACM Annual Conference on Human Factors in Computing Systems (CHI'23) (Ranking A*).

- (c) Refereed articles in scientific journals
- Cauchard^S, J.R., Ainsworth^{PI}, P.F., Romano^{PI}, D.M., Banks^C, B. 2006. Virtual Manuscripts for an Enhanced Museum and Web Experience 'Living Manuscripts'. In Interactive Technologies and Sociotechnical Systems, Lecture Notes in Computer Science (LNCS), 4270.
 (Number of citations: 8, IF: 1.06; Ranking: 99/206 General Computer Science)
- Cauchard^S, J.R., Fraser^{PI}, M., Han^S, T. and Subramanian^{PI}, S. 2012. Steerable Projection: Exploring Alignment in Interactive Mobile Displays. In Personal and Ubiquitous Computing (PUC), 16 (1).
 (Number of citations: 34, IF: 3.006, Ranking Q2 Computer Science, Information systems)
- 3. Cauchard^{PD}, J.R., Frey^{PD}, J., Zahrt^S, O., Johnson^S, K., Crum^C, A., and Landay^{PI}, J.A. 2019. The Positive Impact of Push vs Pull Progress Feedback: A 6-week Activity Tracking Study in the Wild. In PACM Interact. Mob. Wearable Ubiquitous Technol. (IMWUT) 3, 3, Article 76 (September 2019), 23 pages. (Number of citations: 11, Journal replacing ACM Ubicomp A* Ranking)
- 4. Wojciechowska^S, A., Frey^{PD}, J., Mandelblum^S, E., Amichai-Hamburger^C, Y., & Cauchard^{PD}, J.R., 2019. Designing Drones: Factors and Characteristics Influencing the Perception of Flying Robots. In PACM Interact. Mob. Wearable Ubiquitous Technol. (IMWUT) 3, 3, Article 111 (September 2019), 19 pages. (Number of citations: 21, Journal replacing ACM Ubicomp A* Ranking)
- 5. Stumpf^{PI}, S., Peters^{PI}, A., Bardzell^{PI}, S., Burnett^{PI}, M., Busse^{PI}, D., **Cauchard**^{PI}, **J.R.**, and Churchill^{PI}, E. 2020. Gender-Inclusive HCI Research and Design: A Conceptual Review. Foundations and Trends in Human-Computer Interaction: 13 (1), pp 1-69. (Number of citations: 56, Ranking Q1: 11/363 Human-Computer Interaction)
- 6. **Cauchard^{PI}, J.R.**, Khamis^{PI}, M., Garcia^{PI}, J., Kljun^{PI}, M. and Brock^{PI}, A. 2021. Toward a Roadmap for Human-Drone Interaction. ACM Interactions 28 (2) March-April 2021 issue, pp 76-81. (Number of citations: 14)
- 7. Alon^S, O., Rabinovich^C, S., Fyodorov^C, A., and **Cauchard**^{PI}, **J.R.** First Step toward Gestural Recognition in Harsh Environments. *Sensors* 2021, 21(12): 3997. (Number of citations: 1, IF: 3.576; Ranking: 14/64, Instruments and Instrumentation Q1).
- 8. **Cauchard**^{PI}, **J.R.**, Gover^S W., Chen^S W., Cartwright^S, S. and Sharlin ^{PI}, E. Drones in Wonderland Disentangling Collocated Interaction Using Radical Form. In IEEE Robotics and Automation Letters journal (RA-L) (Number of citations: 2, IF: 3.741; Ranking: 7/38, Robotics Q1)
- 9. Shavitt^S, C., Kuzminykh^S, A., Ridel^S, I., and **Cauchard**^{PI}, **J.R.** Naturally Together: A Systematic Approach for Multi-User Interaction With Natural Interfaces. In PACM journal on Human Computer Interaction 5, CSCW2, Article 349 (Oct. 2021) (Number of citations: 1, New journal replacing ACM CSCW Ranking: A*)
- 10. Benmussa^S, C., **Cauchard^{PI}**, **J.R.** and Yakhini^{PI}, Z. Generating alerts from breathing pattern outliers. *Sensors* 2022. (IF: 3.847; Ranking: 16/76, Instruments and Instrumentation Q1).

- 11. Yamin^S, L. and **Cauchard^{PI}**, **J.R.** Generative Adversarial Networks and Data Clustering for Likable Drone. *Sensors* 2022. (IF: 3.847; Ranking: 16/76, Instruments and Instrumentation Q1).
- 12. Shapira^{PI}, S. and **Cauchard^{PI}**, **J.R.** Integrating drones in response to public health emergencies: A combined framework to explore technology acceptance. Frontiers in Public Health (10) Oct. 2022 (IF: 6.461, Ranking 18/182, Public, Environmental & Occupational Health Q1).
 - (d) <u>Published scientific reports</u>
- 1. **Cauchard J.R.** 2006. Design and Development of a Viewing Software for a Synchronised experience in virtual and real museums, M.Sc., Sheffield University, UK.
- 2. **Cauchard J.R.** 2013. Towards Mobile Multi-Display Environments: A Design Exploration Using Projection-Screen Devices, Ph.D., Bristol University, Bristol, UK.
 - (e) Peer-reviewed posters and demos
- 1. **Cauchard**^S, **J.R.** 2011. Mobile multi-display environments. In Proceedings of the 24th annual ACM symposium adjunct on User interface software and technology (UIST '11 Adjunct). ACM. 39–42.
- 2. Ostrin^S, G., Frey^{PD}, J. and **Cauchard^{PI}**, **J.R.** 2018. Interactive Narrative in Virtual Reality. In Proceedings of the 17th International Conference on Mobile and Ubiquitous Multimedia (MUM 2018). ACM. 463–467.
- 3. Ben-Hanania^S, A., Goldberg^S, J. and **Cauchard^{PI}**, **J.R.** 2018. Multi-User Control for Domestic Robots with Natural Interfaces. In Proceedings of the 17th International Conference on Mobile and Ubiquitous Multimedia (MUM 2018). ACM. 433–439.
- 4. Mladenović^C, J., Frey^{PD}, J. and **Cauchard^{PI}**, **J.R.** 2018. Dišimo: Anchoring Our Breath. In Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems (CHI EA '18). ACM. Paper D208, 1–4.
- 5. Kuzminykh^S, A., **Cauchard**^{PI}, **J.R.** 2020. Be Mine: Contextualization of Ownership Research in HCI. In Ext. Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems (CHI EA '20). ACM. 1–9.
- 6. Fartook ^S, O., Oron-Gilad ^{PI}, T. and **Cauchard ^{PI}**, **J.R.** 2023. Designing and Prototyping Drones for Emotional Support. In Companion of the 2023 ACM/IEEE International Conference on Human-Robot Interaction (HRI '23). ACM/IEEE. 1-4.
 - (f) <u>Peer-reviewed workshop articles</u>
- 1. **Cauchard**^S, **J.R.**, Fraser^{PI}, M., Alexander^{PD}, J. and Subramanian^{PI}, S. 2010. Offsetting Displays on Mobile Projector Phones. Pervasive Ubiprojection workshop on Personal Projection.
- 2. **Cauchard**^S, **J.R.**, Fraser^{PI}, M. and Subramanian^{PI}, S. 2011. Designing mobile projectors to support interactivity. CHI'11 Workshop on Mobile and Personal Projection.
- 3. **Cauchard**^S, J.R. 2013. ProDive: Projecting and Interacting Underwater. CHI'13 Workshop Displays Take New Shape: An Agenda for Interactive Surfaces.

- 4. **Cauchard**^{PD}, **J.R.** 2015. Managing Online Availability from an Individual to a Societal Perspective. CHI'15 Workshop Between the Lines: Reevaluating the Online/Offline Binary.
- 5. **Cauchard**^{PI}, **J.R.** 2018. Towards Designing Collocated User Interfaces for Autonomous Vehicles. CHI'18 Workshop Interacting with Autonomous Vehicles: Learning from other Domains.
- 6. Blum^S, J., Cooperstock^{PI}, J. and **Cauchard^{PI}**, **J.R.** 2018. Pseudo-Ambience: Filling the Gap Between Notifications and Continuous Information Displays. Ubicomp'18 Workshop UbiTtention: 3rd International Workshop on Smart & Ambient Notification and Attention Management.
- 7. Frey^{PD}, J. and **Cauchard**^{PI}, **J.R.** 2018. Remote Biofeedback Sharing, Opportunities and Challenges. Ubicomp'18 Intl. Workshop on Computing for Well-Being.
- 8. Boll^{PI}, S., Koelle^S, M. and **Cauchard**^{PI}, **J.R.** 2019. Understanding the sociotechnical impact of automated (aerial) vehicles on casual bystanders. CHI'19 International Workshop in Human-Drone Interaction: iHDI.
- 9. **Cauchard^{PI}, J.R.** and Sharlin^{PI}, E. 2019. "Come To Me Nice Butterfly" Drone Form in Collocated Human-Drone. CHI'19 International Workshop in Human-Drone Interaction: iHDI.
- 10. Kuzminykh^S, A. and **Cauchard**^{PI}, **J.R.** 2020. How We Own Drones: On the Sense of Ownership in the Drone Design. CHI'20 Interdisciplinary Workshop on Human-Drone Interaction (iHDI 2020)
- 11. Auda^S, J., Weigel^C, M., **Cauchard^{PI}, J.R.** and Schneegaβ^{PI}, S. 2020. ProxyDrone: Autonomous Drone Landing on the Human Body. CHI'20 Interdisciplinary Workshop on Human-Drone Interaction (iHDI 2020)
- 12. Herdel^S, V., Kuzminykh^S, A., Hildebrandt^{PI}, A., and **Cauchard^{PI}**, **J.R.** Elicitation of Emotional Responses to Flying Robots with Facial Expressions. CHI '21 Workshop on Momentary Emotion Elicitation and Capture (MEEC 2021)
- 13. Fartook^S, O., Oron-Gilad^{PI}, T., and **Cauchard^{PI}**, **J.R.** Social Drones Design and Prototyping of Robotic Artifacts. HRI '22 2nd International Workshop on Designerly HRI Knowledge
- 14. Herdel^S, V., Kuzminykh^S, A., Hildebrandt^{PI}, A., and **Cauchard^{PI}**, **J.R.** Drone in Love: Emotional Perception of Facial Expressions on Flying Robots. CHI'22 Workshop on the Future of Emotions in HCI (EMOCHI 22)
- 15. Ginosar^S, E., Kraemer^S, S., Koelle^{PI}, M., Müller^{PD}, H., Boll^{PI}, S., and **Cauchard**^{PI}, **J.R.** Co-Design of Autonomous Drones for Interactions with Bystanders. CHI'23 Workshop on Trust and Reliance in AI-Assisted Tasks (TRAIT)
- 16. Herdel^S, V., Yamin^S, L., Ginosar^S, E. **Cauchard**^{PI}, **J.R.** Attitude Towards Drone Capabilities in Various Contexts: Ethical Implications and Challenges. CHI'23 Workshop on Socially Assistive Robots as Decision Makers: Transparency, Motivations, and Intentions (SARs: TMI 2023).

• Lectures and Presentations at Meetings and Invited Seminars

- (a) Selected invited plenary lectures at conferences/meetings
- 2015. Out of the ordinary jobs after a CS degree.
 Panel Moderator. ACM womENcourage. Uppsala, Sweden.
- 2. 2016. Out-of-body Interactions. AUI 2016: 1st Asian Workshop on User Interface. Tokyo, Japan.
- 3. 2017. Innovative drone applications for journalism. DIGIT. Herzliya, Israel.
- 4. 2018. Games of Drones. Reaktor Breakpoint Conference. Helsinki, Finland.
- 5. 2018. La inteligencia artificial en la sociedad (in Spanish). Congreso Internacional de Inteligencia Artificial. Alicante, Spain.
- 6. 2020. Game of Drones. AABGU Mid-Winter board, Redwood City, CA, USA.
- 7. 2021. Future of Work Conversations. Invited Speaker. Online.
- 8. 2021. Namibian Council for Higher Education, Windhoek, Namibia. Online.
- 9. 2023. HCI Seminar. Stanford University, CA, USA
 - (b) Selected presentation of papers at conferences (oral)
- 1. **Cauchard J.R.**, Löchtefeld M., Irani P., Schoening J., Krüger A., Fraser M. and Subramanian S. 2011. Visual Separation in Mobile Multi-Display Environments. UIST'11. Santa Barbara, CA, USA.
- 2. Cauchard J.R., Löchtefeld M., Krüger A., Fraser M. and Subramanian S. 2012. m+pSpaces: Virtual workspaces in the spatially-aware mobile environment. MobileHCI'12. San Francisco, CA, USA.
- 3. **Cauchard J.R.**, E J.L., Zhai K.Y. and Landay J.A. 2015. Drone & Me: An Exploration Into Natural Human-Drone Interaction. Ubicomp'15. Osaka, Japan.
- 4. **Cauchard J.R.**, Zhai K.L., Spadafora M. and Landay J.A. 2016. Emotion Encoding in Human-Drone Interaction. HRI '16. Christchurch, New Zealand.
- 5. **Cauchard J.R.** Cheng J., Pietrzak T. and Landay J.A. 2016. ActiVibe: Design and Evaluation of Vibrations for Progress Monitoring. CHI'16. San Jose, CA, USA
- 6. Cauchard J.R., Tamkin A., Wang C.Y., Vink L., Park M., Fang T. and Landay J.A. 2019. drone.io: Gestural & Visual Interface for Human-Drone Interaction. HRI '19. Daegu, South Korea.
- 7. **Cauchard J.R.**, Frey J., Zahrt O., Johnson K., Crum A., and Landay J.A. 2019. The Positive Impact of Push vs Pull Progress Feedback: A 6-week Activity Tracking Study in the Wild. Ubicomp 2019. London, UK
- 8. Wojciechowska A., Frey J., Mandelblum E., Amichai-Hamburger Y., and Cauchard J.R. 2019. Designing Drones: Factors and Characteristics Influencing the Perception of Flying Robots. Ubicomp 2019. London, UK
- 9. **Cauchard, J.R.**, Gover W., Chen W., Cartwright, S. and Sharlin, E. Drones in Wonderland Disentangling Collocated Interaction Using Radical Form. IROS '21. Online.

- (c) <u>Selected presentations at international workshops (see list p.14-14)</u>
- 1. 2010. Pervasive Ubiprojection workshop on Personal Projection. Offsetting Displays on Mobile Projector Phones. Finland.
- 2. 2011. CHI'11 Workshop on Mobile and Personal Projection. Designing mobile projectors to support interactivity. Canada.
- 3. 2013. CHI'13 Workshop Displays Take New Shape: An Agenda for Interactive Surfaces. ProDive: Projecting and Interacting Underwater. France.
- 4. 2015. CHI'15 Workshop Between the Lines: Reevaluating the Online/Offline Binary. Managing Online Availability from an Individual to a Societal Perspective. Korea.
- 5. 2018. CHI'18 Workshop Interacting with Autonomous Vehicles: Learning from other Domains. Towards Designing Collocated User Interfaces for Autonomous Vehicles. Canada.
- 6. 2019. CHI'19 International workshop in Human-Drone Interaction: iHDI. "Come To Me Nice Butterfly" Drone Form in Collocated Human-Drone Interaction. UK.
 - (d) Selected seminar presentations at universities and institutions
- 1. 2012. Samsung SISA User Experience Center. San Jose, CA, USA. Mobile Multi-Display Environments
- 2. 2014. Cornell Tech. dTech Seminar. New York City, NY, USA. Mobile.Projector.Interaction
- 3. 2015. Berkeley University. BID Seminar. Berkeley, CA, USA. Projections. Vibrations. Interactions
- 4. 2015. Waterloo University. Waterloo, ON, Canada. Projections. Vibrations. Interactions
- 2015. INRIA Bordeaux. Bordeaux, France.
 An Exploration Into Natural Human-Drone Interaction
- 6. 2015. Technicolor. Los Altos, CA, USA. On-body and Out-of-body Interactions
- 7. 2016, Concordia University. Montreal, Quebec, Canada. On-body and Out-of-body Interactions
- 8. 2016. UNC Charlotte. Charlotte, NC, USA. On-body and Out-of-body Interactions
- 9. 2016. Drexel University. Philadelphia, PA, USA. On-body and Out-of-body Interactions
- 10. 2016. Rochester University. Rochester, NY, USA. On-body and Out-of-body Interactions
- 11. 2016. George Mason University. Fairfax, VA, USA. On-body and Out-of-body Interactions

- 12. 2016. Technion Israel Institute of Technology. Haifa, Israel. On-body and Out-of-body Interactions
- 13. 2016. Hebrew University of Jerusalem. Jerusalem, Israel. On-body and Out-of-body Interactions
- 14. 2016. Tel Aviv University. Tel Aviv, Israel. On-body and Out-of-body Interactions
- 15. 2016. IBM. Haifa, Israel. On-body and Out-of-body Interactions
- 16. 2016 Brown Institute for Media Innovation. Stanford, CA, USA. g:drone presentation and live demo
- 17. 2016. Namibia University of Science and Technology. Windhoek, Namibia. On-body and Out-of-body Interactions
- 18. 2017. Interdisciplinary Center Herzliya Gala. Israel. Drones: The Upcoming Revolution
- 19. 2017. Tel Aviv University. Guest Lecture, Israel. Aerial Human-Robot Interaction
- 20. 2017. Café Scientifique. French Embassy Tel Aviv, Israel. Human-Drone Interaction
- 21. 2017. Carleton University. Ottawa, Canada. On-body and Out-of-body Interactions
- 22. 2018. Ben Gurion University of the Negev. Be'er Sheva, Israel. On-body and Out-of-body Interactions
- 23. 2018. Research seminar and guest lecture. University of Primorska, Slovenia. On-body and Out-of-body Interactions
- 24. 2018. Drone Conference. Herzliya, Israel. Towards Human-Drone Interaction
- 25. 2018. ACM Summer School on Intelligent User Interfaces in the Era of IoT and Smart Environments. Drone Tour Guide & Interaction Metaphors. Haifa, Israel
- 26. 2018. ENAC: Ecole Nationale de l'Aviation Civile. Toulouse, France. Collocated Human-Drone Interaction
- 27. 2019. University of Melbourne. Melbourne, Australia.
 Haptic Interfaces for Wearable Devices
- 28. 2019. University of Sydney. Sydney, Australia. On-body and Out-of-body Interactions
- 29. 2019. KAIST. Daejeon, Korea. On-body and Out-of-body Interactions
- 30. 2019. University of Swansea. Swansea, United Kingdom. On-body and Out-of-body Interactions
- 31. 2019. HCI4Safety Summer School. Oldenburg, Germany. Challenges and Potentials in Human-Drone Interaction

- 32. 2019. Israeli Conference on Robotics (ICR 2019), Israel. Design and Development of Natural Human-Drone Interaction
- 33. 2021. Calgary University. Online seminar. Calgary, Canada. On-body and Out-of-body Interactions
- 34. 2021. University of Swansea. Swansea, United Kingdom. Towards Natural Human-Drone Interaction
- 35. 2022. TU Wien. Vienna, Austria
 On-Body and Out-of-Body Interactions & Experiences

Research Grants and Funding

Stanford University

- 2015-2016. Magic Grant Awards. The Brown Institute for Media Innovation. Cauchard, J., E., J. and Landay, J. G:Drone An Interactive Personal Drone Tour Guide. Amount: \$125K for a year. Role: Primary author and researcher.
- 2015-2018. SAIL-Toyota Center for AI Research at Stanford University. \$25M / 5 y. Role: contributed to the writing of the proposal (User Experience in the car)

IDC Herzliya

- 2017-2020. Start-up fund to establish my laboratory \$150K. Role: PI.
- 2018. Amazon Web Services (AWS). Grant for hosting web services for physiological signal project. \$20K for a year.

Ben Gurion University of the Negev

- -- External Funding --
- 2019. IBM Research Funding. Cauchard, J.R. VR-Supported Tools for Security Analysts. \$80K. Role: PI.
- 2020-2022. Rafael Research Collaboration. Cauchard, J.R. Human-Drone teaming in firefighting. \$85K. Role: PI.
- 2022. German-Israeli Foundation (GIF). Cauchard, J.R. and Boll, S. (Oldenburg University, Germany). Designing goal sharing for autonomous vehicle acceptability in human spaces, as a sustainable efficient. \$87K. Role: PI.
- 2022-2025. Israel Innovation Authority. Human-Robot Interaction Consortium. Cauchard, J.R. Natural Human-Robot Interaction. \$248K. Role: PI.
- 2022-2026. Israel Science Foundation (ISF) Cauchard, J.R. Foundations for On-Body Human-Drone Interaction. \$235K. Role: PI.
- 2023. Région Occitanie Défi-clé "Robotique centrée sur l'Humain". Cauchard, J.R. ABCD: Acceptable close-Body Co-working Drone. \$8K. Role: Visiting Scholar, hosted by Sidobre, D., LAAS/CNRS and Brock, A., ENAC, France.

- -- Internal Funding --
- 2019-2024. Start-up fund to establish my laboratory \$470K and for infrastructure \$130K. Role: PI.
- 2019-2022. ABC Robotics Research Development Project. Cauchard, J.R. and Sharlin, E. (Calgary University, Canada). Designing Natural Human-Drone Interaction According to Perception and Awareness. \$45K. Role: PI.
- 2020-2021. COVID-19 Corona Challenge. Cauchard, J.R. Medical Emergency Drones and vulnerable populations. \$5K. Role: PI.
- 2021-2022. BGU-NJIT Joint Seed Research Fund. Cauchard, J.R. and Wohn, Y. (NJIT, USA). Intelligent Drones in AI-based Firefighting System. \$8K. Role: PI.
- 2021-2024. ABC Robotics Research Development Project. Eyal, T., Oron-Gilad, T., and Cauchard, J.R. Drones as Emotional Support Technology. \$45K. Role: co-PI.

Present Academic Activities

Research in progress

- 1. Natural Human-Drone Interaction. Eyal Ginosar, Woody Gover, Lee Yamin, Susanne Boll, and Ehud Sharlin. 2024
- 2. Emotional computing with drones. Viviane Herdel, Ori Fartook, Tal Oron-Gilad, and Yisrael Parmet. 2024
- 3. Cross-cultural human-drone interaction. Anastasia Kuzminykh, Andres Lucero, Foad Hamidi, Simon Robinson. 2024

Grants in preparation

- 1. MOST SSF. 2024. Cauchard, J.R. DroneSPA: Autonomous Drones in Support of Physical Activity. \$340K. Role: co-PI with Dr. Woźniak, Chalmers University of Technology, Sweden
- 2. DFG-ME. 2024. Cauchard, J.R. Beyond Signaling Prosocial communication of automated vehicles with bystanders in shared urban spaces. Role: co-PI with Prof. Boll, Oldenburg University, Germany

Articles to be published

In preparation:

- 1. **Cauchard**^{PI}, **J.R.**, Yamin^S, L., Ridel^S, I., Sela^C, Y., & Amichai-Hamburger^{PI}, Y. Drone in My Eyes: Personality on Drone Perception. In preparation for submission in Computers in Human Behavior journal (IF: 8.957, Ranking 3/90, Psychology, Experimental Q1).
- 2. Ridel^S, I., OstrinT, G., Biller^C, O. and **Cauchard^{PI}**, **J.R**. Andromeda: A VR-Based Visualization Software for Cybersecurity Analysis. In Preparation for submission in Springer Virtual Reality journal (IF: 3.63; Ranking: Q1, Computer Science)
- 3. **Cauchard^{PI}, J.R.** and Wojciechowska^S, A. NADS: Adapting the Negative Attitude Towards Robots Scale for Drones. In preparation for submission at ACM Transactions on Human-Robot Interaction (THRI) journal.
- 4. Lorch^S, A. & Cauchard^{PI}, J.R. Exploration into the Design Space of Augmented Mirrors. In preparation for submission in ACM Interact. Mob. Wearable

- Ubiquitous Technol. (IMWUT) (Journal replacing ACM Ubicomp A* Ranking)
- 5. Ginosar^S, E., Kraemer^S, S., Koelle^C, M., Müller^C, H., Boll^{PI}, S. and **Cauchard**^{PI}, **J.R.** "I Have a Package For Mr. & Mrs. Smith, Can You Point Me to Their House?" Co-Designing Bystanders' Interaction with Autonomous Delivery Vehicles. Under preparation for PACM THRI journal.

Submitted for publication:

- 1. Herdel^S, V., Kuzminykh^C, A., Parmet^{PI}, Y., and **Cauchard^{PI}**, **J.R.**Anthropomorphism and Affective Perception: Dimensions, Measurements, and Interdependencies in Aerial Robotics. Under revision at IEEE Transactions on Affective Computing (IF: 13.99, Ranking: 2/24, Computer Science, Cybernetics Q1)
- 2. Herdel^S, V. and **Cauchard**^{PI}, **J.R.** Emotional Appropriateness in Human-Drone Interaction. Under revision for the International Journal of Social Robotics (IF: 3.8, Ranking: 10/41, Robotics Q1).
- 3. McKendrick^S, Z., Finn^{PI}, P., Sharlin^{PI}, E. and **Cauchard^{PI}, J.R.** Waiting in the Wings: How Performance Practice can Help Shape the Future of Human-Drone Interaction. Under revision to Graphics Interface 2023.
- 4. Deja^S, J.A., Pucihar^{PI}, K.C., Kljun^{PI}, M. and **Cauchard**^{PI}, **J.R.** Swarms Up Close: Exploring Scenarios in Human-Swarm Interaction. Submitted to IEEE ROMAN 2023.
- 5. Fartook^S, O., MacLean^{PI}, K., Oron Gilad^{PI}, T., and Cauchard^{PI}, J.R. Expanding the Interaction Repertoire of a Social Drone: Physically Expressive Possibilities of a Perched BiRDe. Submitted to the International Journal of Social Robotics (IF: 3.8, Ranking: 10/41, Robotics Q1).
- 6. Fartook^S, O., Oron Gilad^{PI}, T., and **Cauchard^{PI}**, **J.R.** Exploring the Design Space of Emotional Support Drones. Submitted to ACM Interact. Mob. Wearable Ubiquitous Technol. (IMWUT) (Journal replacing ACM Ubicomp A* Ranking)

• Additional Information

Outreach

- 2018. Career Panelist at the Broadening Participation Workshop event at Ubicomp '18
- 2017. Panelist for N2Women Diversity event at Ubicomp '17
- 2015. ACM womENcourage Panel Chair
- 2015. Networking Women (N2 Women) event organizer at MobiSys '15
- 2014. Grace Hopper Conference: Birds of a Feather organizer on designing for women
- 2010-2012. Founder & main organizer Girl Geek Dinners, Bristol (over 350 members)