

DHRUV VERMA

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 [Dhruv Verma - Profile](#)

OVERVIEW

I'm a Ph.D. student at the University of Toronto advised by Dr. Alex Mariakakis, working at the intersection of emerging ubiquitous technologies and human-centered computing. My research focuses on building practical, unobtrusive, and deployable sensing systems that have applications in healthcare, context awareness, virtual & augmented reality, and novel interactions.

EDUCATION

University of Toronto | Toronto, Canada

2021 - Present

Ph.D. in Computer Science

Advisor: [Alex Mariakakis](#)

Indraprastha Institute of Information Technology Delhi | Delhi, India

2017 - 2021

B.Tech in Computer Science & Engineering

PEER-REVIEWED PUBLICATIONS

4. Vimal Mollyn, Karan Ahuja, **Dhruv Verma**, Chris Harrison, Mayank Goel. *Under Submission at Proceedings of the ACM 2022 CHI Conference on Human Factors in Computing (CHI'22)*.
3. **Dhruv Verma**, Sejal Bhalla, Dhruv Sahnan, Jainendra Shukla, and Aman Parnami. 2021. ExpressEar: Sensing Fine-Grained Facial Expressions with Earables. *In Proceedings of the ACM on Interactive Mobile Wearable & Ubiquitous Technologies (IMWUT'21)* 5, 3, Article 129 (Sept 2021), 28 pages. <https://doi.org/10.1145/3478085>
2. **Dhruv Verma**, Kshitij Gulati, Vasu Goel, and Rajiv Ratn Shah. 2020. Fashionist: Personalising Outfit Recommendation for Cold-Start Scenarios. *In Proceedings on the 28th ACM International Conference on Multimedia (MM'20)*. <https://doi.org/10.1145/3394171.3414446>
1. **Dhruv Verma**, Kshitij Gulati and Rajiv Ratn Shah. 2020. Addressing the Cold-Start Problem in Outfit Recommendation Using Visual Preference Modelling. *In Proceedings of the IEEE International Conference on Multimedia Big Data (BigMM'20)*. <https://doi.org/10.1109/BigMM50055.2020.00043>

RESEARCH EXPERIENCE

Research Assistant | University of Toronto

- Computational Health and Interaction (CHAI) Lab, Advised by Dr. [Alex Mariakakis](#)
- Leading a project on performing robust and scalable gait analysis in everyday living environments.

Sept. 2021 -
Present

Visiting Student Researcher | Carnegie Mellon University

- Smart Sensing for Humans (SMASH) Lab, Advised by Dr. [Mayank Goel](#)
- Worked on a novel privacy-preserving activity recognition system. Work submitted to ACM CHI 2022.

June 2020 -
May 2021

Undergraduate Research Assistant | IIIT Delhi

- Weave Lab & HMI Lab, Advised by Dr. [Aman Parnami](#) & Dr. [Jainendra Shukla](#)
- Created a novel facial expression recognition system leveraging motion sensing on wireless earbuds. Work accepted to ACM UbiComp 2021
- Built a novel framework for integrating human affect & cognitive states in context-aware applications.

Dec. 2018 -
May 2021

AWARDS & HONORS

Mitacs Globalink Research Internship Award

Summer 2020

ACADEMIC SERVICE

Feature Editor, ACM XRDS Magazine

2021 - Present

Student Volunteer, ACM UbiComp/ISWC

2020, 2021

Student Volunteer, ACM UIST

2020

TEACHING EXPERIENCE

Teaching Assistant, University of Toronto | Introduction to Image Understanding

Fall 2021

Teaching Assistant, IIIT Delhi | Privacy and Security in Online Social Media

Winter 2021

Teaching Assistant, IIIT Delhi | Prototyping Interactive Systems

Fall 2019

REFERENCES

Alex Mariakakis (Assistant Professor, University of Toronto)

Aman Parnami (Assistant Professor, IIIT Delhi)

Jainendra Shukla (Assistant Professor, IIIT Delhi)

Mayank Goel (Assistant Professor, Carnegie Mellon University)

- Last updated: Oct. 24, 2021 -