ARJUN ARUNASALAM

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PROFESSIONAL SUMMARY

4th-year user-centered Computer Science Ph.D. student with expertise combining (1) programming skills, (2) qualitative methods, and (3) quantitative/statistical research to study end-user interaction with technology. My goal is to obtain a Summer 2024 HCI/user-centered research internship.

EDUCATION

Purdue University **May 2025 (Expected)**

Ph.D. Student in Computer Science (GPA: 4.0/4.0)

Relevant Coursework: *Data Mining, Algorithm Design, Information* Security

University of Michigan, Ann Arbor **May 2020**

B.S.E in Computer Engineering (*summa cum laude*, 3.77/4.00)

Relevant Coursework: *Data Structures & Algorithms, Computer Vision, Programming Languages*

SKILLS

Research Interests: Human Factors, Security and Privacy, UX, HCI

Methods: Survey development, Inferential statistics, Qualitative analysis, Usability testing, Focus groups, Interviews, Web crawling, Digital ethnography

Programming Languages and Tools: Python, C++, Go, MATLAB, R, Qualtrics

RESEARCH PROJECTS AND PROFESSIONAL EXPERIENCE

Research Assistant - Purdue University **August 2020 - Present**

- Designed *surveys*, *focus groups*, and *interviews* to study refugee interaction with digital abuse.
- Designed *between subjects* user study for ongoing WebVR project.
- Analyzed mental wellness service data using *unsupervised ML* and performed *usability testing* to understand effectiveness of designed digital mental wellness tool.
- Conducted *in-depth literature survey* to curate a misconception dataset and asses large language models' ability to assess misconceptions through collaborative *data annotation*.
- Designed interactive *surveys* to *quantitatively infer* user perception of permission alerts.
- Led *online ethnography* via data crawling to study abuse on content & e-commerce platforms.
- Disseminated research through top-tier academic conference papers (acceptance rates ∼15-25%).

Cloud Security Research Intern - IBM Research **May 2019 - April 2020**

- Contributed to IBM's Code Risk Analyzer project.
- *Programmed APIs* for vulnerability detection and automated remediation of vulnerable Dockerfiles.
- *Designed UIs* using JavaScript and HTML/CSS to visualize analytic results.

MENTORSHIP, TEACHING AND SERVICE

Guest Lecture - Purdue University **2022-2023**

- Lead one lecture on *user-centered research methodologies*.
- Lead three lectures on the impact of online bad actors/abuse on users.

Mentorship - Purdue University **2020-2023**

- Mentored 4 students in developing and submitting research projects for publication.

Teaching Assistant - Purdue University **2020-2023**

- Conducted lab/recitations and graded assignments for ∼30-40 students, over three semesters.
- Awarded "Graduate Teaching Award" (Oct 2023) for leadership services.

Academic Reviewing **2022-2023**

- Peer-reviewed academic manuscripts for top-tier CS conferences (NDSS, Oakland, USENIX, CCS).

PEER-REVIEWED PUBLICATIONS

Conferences are the primary academic publishing venues for computer scientists. Publications listed below are in top-tier / A-rank conferences (Acceptance Rates: $15 - 25\%$*)*

Conference Publications

$*$ denotes equal contribution

C5 **Arjun Arunasalam***, Habiba Farrukh*, Eliz Tekcan*, and Z. Berkay Celik
Understanding the Security and Privacy Implications of Online Toxic Content on Refugees,
Proceedings of the **USENIX** Security Symposium, 2024 (to appear)

C4 Reham Mohamed, **Arjun Arunasalam**, Habiba Farrukh, Jason Tong, Antonio Bianchi, and Z. Berkay Celik
ATTention Please! An Investigation of the App Tracking Transparency Permission,
Proceedings of the **USENIX** Security Symposium, 2024 (to appear)

C3 **Arjun Arunasalam***, Andrew Chu*, Muslum Ozgur Ozmen, Habiba Farrukh, and Z. Berkay Celik
The Dark Side of E-Commerce: Dropshipping Abuse as a Business Model,
Proceedings of the Network and Distributed System Security Symposium (**NDSS**), 2024, to appear (Acceptance Rate: 21%)

C2 Yufan Chen*, **Arjun Arunasalam***, and Z. Berkay Celik
Can Large Language Models Provide Security & Privacy Advice? Measuring the Ability of LLMs to Refute Misconceptions [Preprint]
Proceedings of the Annual Computer Security Applications Conference (**ACSAC**), 2023, to appear (Acceptance Rate: 23.3%)

C1 Andrew Chu*, **Arjun Arunasalam***, Muslum Ozgur Ozmen, and Z. Berkay Celik
Behind the Tube: Exploitative Monetization of Content on YouTube [Paper Here]
Proceedings of the **USENIX** Security Symposium, 2022, (Acceptance Rate: 17%)