Veronica Pimenova

PhD Student in Computer & Information Science

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LinkedIn GitHub **X** X(Twitter)

Education

University of Michigan (UM), Ann Arbor, MI **August 2025 – May 2030 (expected)**
Ph.D. in Computer & Information Science GPA: 3.8
Relevant Coursework: Qualitative Analysis, Quantitative Analysis, Mixed Methods

Carnegie Mellon University (CMU), Pittsburgh, PA **August 2022 – May 2025**
B.S. in Information Systems (Dean's List with High Honors) GPA: 3.8
Advised by: Andrew Begel
Relevant Coursework: Imperative Computation, Designing Human Centered Software, Database Design & Development, Interactive Design, Application Design & Development, Software Engineering, Mobile App Development

Selected Research Experience

Doctoral Researcher, University of Michigan **August 2025 – Present**
Researching human factors of software engineering with a focus on accessibility and developer productivity. Conducted 14+ interviews on developer co-presence practices and established an empirical framework for AI-mediated workplace collaboration.

Research Collaborator, Microsoft Research & UMass Amherst **May 2025 – Present**
Advisors: Madeline Endres, Sarah Fakhoury, Chris Bird, Margaret Storey. Conducting qualitative research on "vibe coding" in developer communities and its impact on developer burnout. Leading study design, prescreening, and participant interviews to evaluate sociotechnical challenges.

Research Assistant, Carnegie Mellon Software & Societal Systems **Sept 2022 – May 2025**
Advisor: Andrew Begel. Led user studies (27+ participants) evaluating accessible learning platforms for neurodiverse (ADHD/autism) students. Applied ML models for temporal segment detection in Scratch-based computing education.

Research Collaborator, CMU Heinz College / Robotics Institute **May 2024 – June 2025**
Advisors: Uttara Ananthakrishnan, Michael Smith, Andrew Hundt. Performed large-scale SQL/BigQuery data analysis on digital piracy streams; developed Python tools to analyze behavioral datasets related to Autism Spectrum Disorders.

Selected Publications

Pimenova, V., Berstein, S. Madan, S. Jain, D. Potluri, V. *Two's a Crowd: Human and AI-Based Copresence for Developers with ADHD*, under submission.

Pimenova, V., Fakhoury, S., Bird, C., Storey, M., Endres, M. *Good Vibrations? A Qualitative Study of Co-Creation, Communication, Flow, and Trust in Vibe Coding.* ACM Transactions on Software Engineering and Methodology (TOSEM) 2026.

Pimenova, V., Lee, C., Bhakdibhumi, B., Chu, S., Begel, A. *Leveling the Playing Field: Temporal Video Segmentation for Individuals with ADHD in Computing Education.* ACM SIGACCESS Conference on Computers and Accessibility (ASSETS) 2026.

Pimenova, V., Sechayk, Y., Murai, F., Hundt, A., Dori-Hacohen, S. *A Longitudinal Autoethnography of Email Access for a Professional with Chronic Illness and ADHD: Preliminary Insights.* ACM SIGACCESS Conference on Computers and Accessibility (ASSETS) 2025.

Madan, S., Bindu, S., **Pimenova, V.**, Seehorn, E., Potluri, V. *Reflections and Recommendations on AI Adoption Practice from a Mixed-Ability Research Group.* ACM SIGACCESS Conference on Computers and Accessibility (ASSETS) 2026.

Zhang, X., Subramonyam, H., Sarkar, A., Drosos, I., Wang, J., Lee, K., **Pimenova, V.**, Chen, X., Lukoff, K. *Generative Design and Vibe Coding: Rethinking The Design-Development Divide for UI Prototyping.* ACM Conference on Human Factors in Computing Systems (CHI) 2026.

Invited Talks & Presentations

Pimenova, V. "So you want to do a PhD? Research in Human Factors of Software Engineering." Guest Lecture presented at CMU Course 67-200 (Sept 2026).

Pimenova, V. "Accessibility Research in Software Design." Guest Lectures presented at CMU GAAD (May 2025), CMU Accessibility Seminar (Dec 2024), CMU Family Weekend (Sept 2024), and Course 67-200 (Sept 2024).

Pimenova, V. "Enhancing Learning Platforms for Individuals with ADHD in XR Education." Presented at XR Access Symposium (2025), ACM SIGCSE (2025), and CMU Meeting of the Minds (2023–2025).

Fellowships, Major Grants & Awards

$159,000 National Science Foundation (NSF) Graduate Research Fellowship (GRFP) **2026**
Recognized for research excellence in AI for developer productivity and well-being.

$130,000 Rackham Merit Fellowship, University of Michigan **2025**

$20,000 MSA Deike-Ryan Scholarship Program, Mine Safety Appliances **2024**

$10,000 Raytheon Technologies URM Award, $(ISC)^2$ **2024**

Microsoft Research New Future of Work Report Feature **2025**
Featured for developing a "theory of vibe coding" (p. 64, MSR New Future of Work Report).

Professional Experience

Associate Product Manager Intern, Pegasystems **Jan 2025 – May 2025**
Collaborated with the Customer Decision Hub team to design and prioritize enterprise product features optimizing customer engagement workflows.

Software Engineering Intern, Forevergreen **May 2024 – Aug 2024**
Engineered Python backend services for a carbon calculator app, optimizing data storage efficiency by 30%. Developed REST APIs and integrated TypeScript UI components.

Machine Learning Intern, Velo AI **May 2023 – Aug 2023**
Built object detection models and animation overlays for video processing. Conducted field testing in Pittsburgh to validate spatial detection algorithms.

Software Engineering Intern, Argo AI **May 2022 – Aug 2022**
Trained a random forest lane-blocking classifier on real-world autonomous vehicle video data and deployed perception models to production environments.

Teaching, Service & Mentorship

Head Teaching Assistant, Carnegie Mellon University **Jan 2024 – May 2025**
Course: *Information Systems Milieux (67-250)*. Managed recitation sessions, curriculum planning, and TA mentorship for 100+ undergraduate students (TA from Jan 2024 – May 2024).

Academic Service & Reviewing: Conference Reviewer for ACM CHI (2025 – present); Student Volunteer at ACM SIGCHI (2026), SIGASSETS (2024–2026), and SIGCSE (2025); Member of AccessComputing (2024 – Present).

Students Mentored: Jay Jeong (UM), Shalini Madan (UM), Baramee Bhakdibhumi (CMU), Parishi Jain (CMU), Chris Lee (CMU), Jiayang Shi (CMU), Octavius Tan (CMU), Emily Yu (CMU).