Souti Chattopadhyay

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Curriculum Vitae

Research interests

Human-Computer Interaction. Software Engineering. AI for Societal Good. Cognitive Processes in Humans. Accessibility. Inclusive Design. Intelligent Interfaces. Social Computing.

Employment

University of Southern California — Los Angeles, California
WiSE Gabilan Assistant Professor — 2022 – Present
Thomas Lord Department of Computer Science

Education

Oregon State Universtity — Corvallis, Oregon
PhD in Computer Science — 2016 - 2022
Department of Electrical Engineering and Computer Science

Awards

WiSE Gabilan Assistant Professorship — 2023

Grants

DARPA Artificial Intelligence Exploration (AIE): Friction for Accountability in Conversational Transactions — 2023
USC + Amazon Center on Secure & Trusted ML — 2023

Publications

NomNom: Explanatory Function Names for Program Synthesizers
Amirmohammad Nazari, **Souti Chattopadhyay**, Swabha Swayamdipta, Mukund Raghothaman.
International Conference on Software Engineering, 2024
Poster

Understanding and Facilitating Sensemaking in Computational Notebooks
Zixuan Feng, **Souti Chattopadhyay**, Gonzalo Ramos, Titus Barik, Anita Sarma.
Computer Supported Cooperative Work, CSCW
Under Submission

Designing adaptive interventions for human-aware autonomous systems
Vidisha Kudalkar, Anirudh Alameluvari, **Souti Chattopadhyay**, Jyotirmoy Deshmukh.
Humans in Cyber-Physical Systems, 2023.
Workshop Paper

Cognitive Biases in Software Development

Souti Chattopadhyay, Nicholas Nelson, Audrey Au, Natalia Morales, Christopher Sanchez, Rahul Pandita, Anita Sarma
Communications of the ACM, Research Highlights, 2022.
Article

Developers Who Vlog: Dismantling Stereotypes through Community and Identity
Souti Chattopadhyay, Denae Ford, Thomas Zimmermann
Conference on Computer-Supported Cooperative Work and Social Computing (CSCW), 2021.

Reel Life vs. Real Life: How Software Developers Share Their Daily Life through Vlogs
Souti Chattopadhyay, Thomas Zimmermann, Denae Ford
The ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE), 2021.

Supporting Code Comprehension via Annotations: Right Information at the Right Time and Place
Marjan Adeli, Nicholas Nelson, **Souti Chattopadhyay**, Hayden Coffey, Austin Henley, Anita Sarma
IEEE Symposium on Visual Languages and Human-Centric Computing (VLHCC), 2020.

A Tale from the Trenches: Cognitive Biases and Software Development
Souti Chattopadhyay, Nicholas Nelson, Audrey Au, Natalia Morales, Christopher Sanchez, Rahul Pandita, Anita Sarma
International Conference on Software Engineering (ICSE), 2020.
ACM Distinguished Paper

What's Wrong with Computational Notebooks? Pain Points, Needs, and Design Opportunities
Souti Chattopadhyay, Ishita Prasad, Austin Z Henley, Anita Sarma, Titus Barik
CHI Conference on Human Factors in Computing Systems (CHI), 2020.
SIGCHI Honourable Mention Award

Mental Models of Mere Mortals with Explanations of Reinforcement Learning
Andrew Anderson, Jonathan Dodge, Amrita Sadarangani, Zoe Juozapaitis, Evan Newman, Jed Irvine, **Souti Chattopadhyay**, Matthew Olson, Alan Fern, Margaret Burnett
ACM Transactions on Interactive Intelligent Systems (TiiS), 2020.
Journal Paper

Explaining reinforcement learning to mere mortals: An empirical study
Andrew Anderson, Jonathan Dodge, Amrita Sadarangani, Zoe Juozapaitis, Evan Newman, Jed Irvine, Souti Chattopadhyay, Alan Fern, Margaret Burnett
arXiV preprint, 2019.

Latent Patterns in Activities: A Field Study of How Developers Manage Context
Souti Chattopadhyay, Nicholas Nelson, Yenifer Ramirez Gonzalez, Annel Amelia Leon, Rahul Pandita, Anita Sarma
International Conference on Software Engineering (ICSE), 2019.

Context in Programming: An Investigation of How Programmers Create Context
Souti Chattopadhyay, Nicholas Nelson, Thien Nam, McKenzie Calvert, Anita Sarma
Cooperative and Human Aspects of Software Engineering (CHASE), 2018.
Workshop Paper

What makes a task difficult? An empirical study of perceptions of task difficulty
Rafael Leano, **Souti Chattopadhyay**, Anita Sarma
Visual Languages and Human-Centric Computing (VL/HCC), 2017.
Short Paper

Context in Exploratory Programming: Towards a Theoretical Framework
Souti Chattopadhyay
Visual Languages and Human-Centric Computing (VL/HCC), 2017.
Doctoral Symposium

Teaching

CSCI 499: Introduction to Human-Computer Interaction
Spring 2024

CSCI 699: User Experience - Methods of Research and Analysis
Spring 2024

CSCI 699: Human Subject Research in Software Systems
Spring 2023

Student Supervision

PhD Students

Zeinabsadat (Athena) Saghi	Fall 2023 -
Run Huang	Fall 2023 -

Sadra Sabouri Halestani Fall 2023 -
Philipp Eibl Fall 2023 -

Masters' Students
Anirudh Alameluvari Spring 2023 2023 - Fall 2023
Katie Foss Spring 2023 - Fall 2023

Undergraduate' Students
David Aoyama Spring 2023 -
Katie Foss Spring 2023 - Fall 2023

Service

Program Committee
Visual Languages and Human-Centric Computing (VL/HCC)
Mining Software Repositories (MSR)
Cooperative and Human Aspects of Software Engineering (CHASE)

Reviewer
Human Factors in Computing Systems (CHI)
Mining Software Repositories (MSR)
Cooperative and Human Aspects of Software Engineering (CHASE)
IEEE Transactions on Software Engineering (TSE)
ACM Transactions on Software Engineering and Methodology (TOSEM)
ACM Transactions on Interactive Intelligent Systems (TiiS)

Outreach and Mentoring
Center for Undergraduate Research in Viterbi Engineering (CURVE)
Undergraduate Mentoring

Saturday Academy's Apprenticeships in Science and Engineering
K-12 Mentoring