

# SENJUTI DUTTA, PhD STUDENT

USER Lab and The COokie Group  
Electrical Engineering and Computer Science Department  
University of Tennessee, Knoxville

# CURRICULUM VITAE

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<b>RESEARCH STATEMENT</b>	My research focuses on characterizing and supporting flexibility in crowd work using different approaches that improve worker productivity and well-being. I specialize in human-computer interaction, machine learning, and ubiquitous computing.	
<b>EDUCATION</b>	<b>University of Tennessee</b> , Knoxville, TN, USA <span style="float: right;"><i>2020 – Present</i></span> <i>Doctorate of Philosophy (Ph.D)</i> , Computer Science Advisor: Dr. Scott Ruoti, Co-advisor: Dr. Anastasia Kuzminykh	
	<b>University of Memphis</b> , Memphis, TN, USA <span style="float: right;"><i>2018 - 2020</i></span> <i>Master's of Science (MS)</i> , Computer Science Thesis: <i>Enabling Efficient and Privacy-Preserving Task Matching</i> Advisor: Dr. Kan Yang	
	<b>Maulana Abdul Kalam Azad University of Technology</b> , West Bengal, India <span style="float: right;"><i>2016 - 2020</i></span> <i>Bachelor's of Computer Science and Engineering (BS)</i> , Computer Science	
<b>RESEARCH EXPERIENCE</b>	<b>University of Tennessee, Knoxville</b> , Knoxville, TN, USA <span style="float: right;"><i>Spring 2022 - Present</i></span> Member, USER Lab and The COokie Group <i>with: Dr. Scott Ruoti, Dr. Anastasia Kuzminykh</i>	
	<b>Google</b> <span style="float: right;"><i>August 2022 - Jan 2023</i></span> <i>Student Researcher</i> <i>with: Praveen Paritosh</i>	
	<b>University of Tennessee, Knoxville</b> , Knoxville, TN, USA <span style="float: right;"><i>Spring 2021- Fall 2021</i></span> <i>Research Assistant</i> , People, Agents, Interactions, and Systems <i>with: Dr. Alex Williams</i>	
	<b>University of Memphis</b> , Memphis, TN, USA <span style="float: right;"><i>Fall 2018- Summer 2020</i></span> <i>Research Assistant</i> , Dept. of Computer Science <i>with: Dr. Kan Yang</i>	
	<b>University of Memphis</b> , Memphis, TN, USA <span style="float: right;"><i>Fall 2017, Summer 2018</i></span> <i>Research Assistant</i> , Dept. of Computer Science <i>with: Dr. Dipankar Dasgupta</i>	
	<b>Jadavpur University</b> , West Bengal, India <span style="float: right;"><i>Spring - Summer 2017</i></span> <i>App Developer Intern</i> , Center for Studies and Rehabilitation of Differently Abled Persons <i>with: Mridul Sankar Barik</i>	
<b>TEACHING EXPERIENCE</b>	<b>Teaching Assistant</b> <b>COSC 522: Machine Learning</b> , University of Tennessee, Knoxville <span style="float: right;"><i>Fall 2021</i></span> <i>with: Hairong Qi.</i>	
	<b>ECE 462: Cyber-Physical Systems Security</b> , University of Tennessee, Knoxville <span style="float: right;"><i>Spring 2021</i></span> <i>with: Qing Charles Cao.</i>	
	<b>COMP 2150: Object Oriented Programming</b> , University of Memphis <span style="float: right;"><i>Fall 2018, Spring 2019</i></span> <i>with: Dr. James Yu</i>	
	<b>COMP 7115: Database Systems</b> , University of Memphis <span style="float: right;"><i>Fall 2019</i></span> <i>with: Dr. Fatih Sen</i>	

COMP 4001/6001: Introduction to Python Programming, University of Memphis      Fall 2019  
with: Dr. William Baggett      Spring 2020

DATA 201: Data Knowledge and Discovery, University of Tennessee, Knoxville      Spring 2022  
with: Dr. Alex Bentley

## PUBLICATIONS

### Peer-Reviewed Conference Papers

- [C.1] Dutta, S., Linder, R., Lowe, D., Rosenbalm, R., Kuzminykh, A., Williams, A. C. (2022, April). Mobilizing crowdwork: A systematic assessment of the mobile usability of hits. In CHI Conference on Human Factors in Computing Systems (pp. 1-20).
- [C.2] Linder, R., Hunter, C., McLemore, J., Dutta, S., Akbar, F., Grover, T., ... Williams, A. C. (2022). Characterizing Work-Life for Information Work on Mars: A Design Fiction for the New Future of Work on Earth. Proceedings of the ACM on Human-Computer Interaction, 6 (GROUP), 1-27.
- [C.3] Yang, K., Dutta, S. (2021, June). Secure and Efficient Task Matching with Multi-keyword in Multi-requester and Multi-worker Crowdsourcing. In 2021 IEEE/ACM 29th International Symposium on Quality of Service (IWQOS) (pp. 1-6). IEEE.
- [C.4] Dutta, S., Barik, M. S., Chowdhury, C., Gupta, D. (2018, January). Divya-Dristi: A smartphone based campus navigation system for the visually impaired. In 2018 Fifth International Conference on Emerging Applications of Information Technology (EAIT) (pp. 1-3). IEEE.

### Peer-Reviewed Workshop Papers

- [W.1] S. Dutta, R. Linder, D. Lowe, M. Rosenbalm, A. Kuzminykh, and A. Williams. The Productivity Paradox: Understanding Tooling Biases in Crowdwork (*CSCW 21 Workshop - Investigating and Mitigating Biases in Crowdsourced Data.*)
- [W.2] S. Dutta, R. Linder, A. Kuzminykh, and A. Williams. Doing Work from Where You Are: AI HIT Management Dispatching Work Tailored to Context (*Accepted at the CHI 22 Crowd Science Workshop.*)

### Peer-Reviewed Posters

- [P.1] S. Dutta, R. Linder, S. Ruoti, A. Williams and A. Kuzminykh. Beyond a One-Size-Fits-All Approach: Towards Personalizing Multi-device Setups in Crowdwork (*Accepted at the UbiComp/ISWC '22.*)

## SKILLS

Programming Languages	Python, C, C++, JavaScript, Java, HTML, SQL
Shell Scripting Language	Bash, Sh, Python, Powershell, MSDOS, PHP
ML Library	PyTorch, Keras, NumPy, Pandas, Scikit-Learn, TensorFlow
Quantitative Tooling	Pandas, R, Matplotlib, Seaborn
Qualitative Tooling	nVivo, Qualtrics, SurveyMonkey
Experimental Design	Crowdsourced Studies, Online Surveys, Lab Studies, Interview
Productivity Tool	Google Docs, Slides, Sheets, Microsoft Word, Excel, PowerPoint.
Design Software	AdobeXd, Sketch, MockFlow, Adobe Creative Suite
Statistical Software	OpenStat, Scipy
Skills	Presentation, Technical Writing, Project Management, Collaboration

## PROFESSIONAL SERVICE

Student Volunteer      ACM CSCW 2021, Virtual  
Student Volunteer      HCOMP 2021, Virtual

## REFERENCES

Scott Ruoti, PhD Supervisor  
Assistant Professor, EECS, University of Tennessee, Knoxville  
Email: ruoti@utk.edu

Anastasia Kuzminykh, PhD Co-supervisor  
Assistant Professor, iSchool, University of Toronto

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**Praveen Paritosh**, Manager  
*Research Scientist, Google*  
*Email: pkp@google.com*

**Alex Williams**, Collaborator and PhD Committee Member  
*Applied Scientist, Amazon*  
*Email: acwio@amazon.com*

**Rhema Linder**, Collaborator  
*Lecturer, University of Tennessee, Knoxville*  
*Email: rlinder@utk.edu*

**Alex Bentley**, Instructor DATA 201  
*Instructor, Department of Anthropology, University of Tennessee, Knoxville*  
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**Qing Charles Cao**, Instructor ECE 462  
*Instructor, Computer Science, University of Tennessee, Knoxville*  
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**Kan Yang**, MS Supervisor  
*Assistant Professor, Computer Science, University of Memphis, Memphis*  
*Email: kan.yang@memphis.edu*

**Dipankar Dasgupta**, Lab Advisor Center for Information Assurance  
*Hill Professor in Cybersecurity and Director, Center for Information Assurance, Computer Science, University of Memphis, Memphis*  
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**Faith Sen**, Instructor COMP 7115  
*Instructor, Computer Science, University of Memphis, Memphis*  
*Email: fsen@memphis.edu*

**William Baggett**, Instructor COMP 4001/6001  
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