# **Anant Mittal**

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#### **EDUCATION**

University of Washington, Paul G. Allen School of Computer Science & Engineering

Seattle, WA, USA

 $Doctor\ of\ Philosophy,\ Computer\ Science\ (Human-Computer\ Interaction)$ 

2019 - Ongoing

University of Michigan, School of Information

Ann Arbor, MI, USA

 $Master\ of\ Science\ in\ Information,\ Specialization\ in\ Data\ Science\ \&\ Machine\ Learning$ 

April 2019

Indraprastha University, Bharati Vidyapeeth's College of Engineering

New Delhi, India

Bachelor in Computer Science

June 2013

## **SKILLS**

Full stack engineering, experiment design, qualitative and quantitative data analysis, machine learning and natural language processing tools, visualization libraries, relational and non-relational databases, Python, TypeScript, JavaScript, React, R, Project Jupyter, SQL, AWS, Azure

#### RESEARCH EXPERIENCE

### Graduate Research Assistant, University of Washington

Seattle, WA, USA

Scientific Software Engineering Center, eScience Institute

Sep '23 - Ongoing

Working with other scientists on impactful research projects, infusing them with the software industry's best practices, and delivering open-source and reusable software

SCOPE: Technology Enhanced Collaborative Care for Cancer

Sep '21 - Ongoing

Advisors: James Fogarty and Gary Hsieh

Designed, built, and deployed a collaborative care management system for people with cancer to manage their treatment and depression

PlayBridge: Examining Personalized AI for Runtime Enhancements to Improve Accessibility of Android Educational Games for Children with Upper Body Motor Impairments

Jun '23 - Ongoing Advisor: James Fogarty

Scientific Discovery through Games, Center for Game Science

Sep '19 - Jan '21

Advisor: Zoran Popović

Applied machine learning and data science techniques to analyze game data for maximizing scientific discovery and engagement in STEM education and crowdsourcing games

#### Research Intern, Microsoft Research

Bengaluru, Karnataka, India

Advisors: Mohit Jain and Pratyush Kumar

Jun '22 - Sep '22

Examined design and implementation of a videoconferencing platform for mixed hearing groups

### Research Assistant, Enlearn

Seattle, WA, USA

Advisors: Yun-En Liu and Zoran Popović

Aug '20 - 7ul '21

Designed and prototyped math learning prototypes for K12 classroom environments to engage students' cognitive processes known as executive functions

### Graduate Research Assistant, University of Michigan

Ann Arbor, MI, USA

Advisor: Christopher Brooks

Sep '17 - April '19

Augmenting Authentic Data Science Environments for Learning Analytic

Built extensions and infrastructure for Project Jupyter to capture the learning behavior of students and crowdsource contextual data science questions and datasets through graduated learners on Coursera

#### **Publications**

Anant Mittal, Meghna Gupta, Roshni Poddar, Tarini Naik, Seethalakshmi Kuppuraj, James Fogarty, Pratyush Kumar, and Mohit Jain. 2023. Jod: Examining Design and Implementation of a Videoconferencing Platform for Mixed Hearing Groups. In The 25th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS' 23), October 22-25, 2023, New York, NY, USA. https://doi.org/10.1145/3597638.3608382

Tae Jones\*, Anant Mittal\*, Jina Suh, Ravi Karkar, Lydia Andris, Yihao Zheng, Amy M. Bauer, Ty Lostutter, Jesse Fann, James Fogarty, and Gary Hsieh. UW SCOPE: Examining Technology-Enhanced Collaborative Care Management of Depression in the Cancer Setting, CHI 2023 Workshop on Bridging HCI and Implementation Science. [PDF]

April Yi Wang, Anant Mittal, Christopher Brooks, and Steve Oney. 2019. How Data Scientists Use Computational Notebooks for Real-Time Collaboration. Proc. ACM Hum.-Comput. Interact. 3, CSCW, Article 39 (November 2019), 30 pages. https://doi.org/10.1145/3359141 [Best Paper Award]

Anant Mittal, Christopher Brooks. Augmenting Authentic Data Science Environments for Learning Analytics. 9th International Conference on Learning Analytics and Knowledge 2019 (LAK19). March, 2019. Tempe, AZ, USA. [PDF]

#### Professional Experience

Mainstay Boston, MA, USA

Deep Learning Intern May '18 - Jul '18

Developed a chatbot using natural language understanding techniques to help students find relevant scholarships

Adobe Systems Pvt Ltd. Bengaluru and Noida, India

Sep '14 - Mar '16

Fun '12 - Ful '12

Winter 2020

Associate Engineering Services Consultant

Built custom big data solutions for Adobe's digital marketing suite clients

**IKP Centre for Technologies in Public Health** Thanjavur, Tamil Nadu, India

Software Engineering Intern

Built system features to create automated graphical reports and visualizations to help health administrators understand patient data

CONSULTING & VOLUNTEERING EXPERIENCE

Aam Aadmi Party, Delhi Government New Delhi, India

Technical Advisor Sep '16 - Jun '17

Prof. Aprajit Mahajan, UC Berkeley New Delhi, India Research Assistant Sep '15 - Aug '16

**Swasth Foundation** Mumbai, Maharashtra, India

Dec '14 - Jun '16 Application Developer

#### TEACHING EXPERIENCE

Teaching Assistant, University of Washington Seattle, WA, USA

CSE 440 Introduction to Human-Computer Interaction Spring 2022 CSE 510 Advanced Topics in Human-Computer Interaction Winter 2022 CSE 583 Software Development for Data Scientists Autumn 2021

CSE 481D Games Capstone Software

Graduate Student Instructor, University of Michigan

Ann Arbor, MI, USA SI 485 Information Analytics Capstone Project Winter 2018

#### **Awards**

## **Achievement and Spot Bonus Award**

Adobe Systems Pvt Ltd.

Bengaluru, Karnataka, India Dec' 2015

Best Start-Up Idea

Bengaluru, Karnataka, India Nov' 2013

2nd Place, Start-Up Weekend Bangalore

## RELEVANT COURSEWORK

## University of Washington, Seattle

Introduction to Deep Learning, Prototyping Interactive Systems, Artificial Intelligence, Machine Learning, Implementation of Programming Languages

## University of Michigan, Ann Arbor

Contextual Inquiry, Introduction to Statistics and Data Analysis, Information Retrieval, Computational Data Science, Data Manipulation and Analysis, Natural Language Processing, Practical Use and Communication of Bayesian Statistics, Networks, Applied Machine Learning, Data Mining, Big Data Analytics