Suchita Mukherjee

Education

MS IN COMPUTER SCIENCE | UNIVERSITY OF CALIFORNIA, DAVIS

FOCUS IN HUMAN COMPUTER INTERACTION AND SOFTWARE ENGINEERING | GPA: 4.0

YOUNG LEADERS PROGRAM | INDIAN SCHOOL OF BUSINESS

RECEIVED YLP FELLOWSHIP

BE IN ELECTRICAL ENGG. | JADAVPUR UNIVERSITY

CGPA: 8.99/10 | CLASS RANK: 3 | FIRST CLASS WITH HONORS

September 2019 – June 2021 Davis, California December 2016 – December 2018 Hyderabad, India August 2012 – June 2016 Kolkata, India

Teaching Experience

Intro to Gender Studies | GENDER AND WOMEN STUDIES DEPT. | UNIVERSITY OF CALIFORNIA, DAVIS

Sep 2019 – Dec 2019

• Introductory course on Social Justice and Feminist Theory. Led two weekly discussions, held office hours and was responsible for grading midterms and finals.

Machine Dependent Programming | COMPUTER SCIENCE DEPT. | UNIVERSITY OF CALIFORNIA, DAVIS

Jan 2019 – Mar 2019

• Coursework on information representation and Intel x86 programming. Led two weekly discussions, held office hours and was responsible for creating auto-graded assignments on Mimir IDE.

MAKE A DIFFERENCE | PROPEL VOLUNTEER | makeadiff.in

Aug 2015 - July 2016

Taught Computer Applications, Mathematics and Physics to underprivileged kids for their school leaving examinations.

Technical Skills

Languages: Java(strong), Javascript(strong), HTML5(strong), CSS(strong) python, R, SQL, C.

Frameworks: AngularJS, Spring, Hibernate, Apache POI, JUnit, Jasmine, Karma, NodeJS.

Tools: Checkstyle, Checkmarx, Jenkins, SonarQube, EclEmma, Git.

Databases: MySQL, MongoDB

Projects

- GIG WORKERS' WELLBEING: Currently conducting research for promoting gig-workers' wellbeing, specifically concentrating on app-based cab drivers, while incorporating social sensing of their partners. The PI for this project is Prof. Hao-Chuan Wang and the work is being done as a part of the Human-Computer Interaction Focus lab of Graduate Group of Computer Science.
- BugSwarm: Involved in visualizing the largest bug dataset built till date with pass-fail build pairs. Also worked on developing BugSwarm's website, http://www.bugswarm.org/
- IMAGE PROCESSING: Analyzed percentage composition of different components in a mixture from greyscale images.
- DIGITAL SIGNALS LIBRARY: Developed reusable library of digital signal inputs programming FPGA board with VHDL.
- GAME THEORY IN MICRO-GRID DISTRIBUTION NETWORKS: Proposed improved methods of power distribution between nodes of a micro-grid using game theory. Final year project and seminar.

Experience

VISA INC. | SOFTWARE ENGINEER, REVENUE AND PRICING SYSTEMS | BANGALORE, INDIA

Aug 2016 - July 2019

- Developed cross-browser pricing web application to gather client banks' quarterly metrics and apply pricing rules for fee generation using HTML5, CSS, Bootstrap3 and AngularJS for frontend with Spring, JPA, Hibernate and MySQL for backend development. Integrated CI/CD pipeline through Jenkins to linearize release process due to business critical nature of the revenue platform. Achieved high unit test coverage of both frontend and backend code bases.
- Security Champion: Developed CSRF token protection for application. Implemented real-time encryption/decryption of plaintext passcodes in application. Achieved 100% remediation of security vulnerabilities found on Checkmarx scans and Penetration testing and led development effort to adhere to coding best practices for application security.
- Custom Caching Solution: Designed and implemented application cache using Guava Cache and Spring Cache Abstraction to reduce API response times which significantly improved user experience
- API interactions with Pricing Engine ORMB: Developed tailored REST and SOAP API interactions with multiple systems external to the pricing platform to efficiently implement all business customizations for fee generation.
- Report Generation Framework: Developed report generation framework with abstracted styling types by leveraging Apache POI to reduce man hours spent defining styling objects used across multiple reports.
- Application Performance: Boosted Spring application performance to meet page load time SLA of 2 seconds by optimizing SQL queries from the application and judicious use of multithreading.

PRICEWATERHOUSECOOPERS INDIA | TECHNOLOGY CONSULTANT INTERN | KOLKATA, INDIA

June 2015 – August 2015

• Power Trading Platform: Developed dashboard on identifying temporal power generation trends for power trading platform of Power Grid Corporation of India.

Awards & Activities

- CROSSHACK 2016: Core Organizer of Kolkata's first medical technology hackathon.
- Subodh Kumar Basu Memorial Bronze Medal 2016 for highest marks in Electrical Engg. Lab, Jadavpur University.
- Meera Rani Mitra Memorial Award 2015 for highest marks in Electrical Engg., in third year of study, Jadavpur University.
- Best Female Graduate 2015 for overall achievement, Jadavpur University