RUCHIT BHARDWAJ

Los Angeles, CA |ruchitbh@usc.edu | ruchitbhardwaj.tech/ |linkedin.com/in/ruch0401/ | +1 (984) 810-9663

EDUCATION

Master of Science in Computer Science **May 2023**
University of Southern California, Los Angeles, California, USA

Bachelor of Engineering in Computer Science **May 2019**
Shri Ramdeobaba College of Engineering and Management, Nagpur, India **GPA: 9.89/10**

TECHNICAL SKILLS

- **Programming**: Java, Spark, Python
- **Frameworks**: Jersey RESTful Web Services Framework (JAX-RS Implementation), Django
- **Web Technologies**: HTML5, CSS3, JavaScript
- **Databases**: PostgreSQL, Oracle
- **Others**: AWS, Maven, Shell Script, Batch Script, IDEA IntelliJ, TeamCity, BitBucket, PgAdmin

PROFESSIONAL EXPERIENCE

ZS Associates India Pvt. Ltd. **Pune, Maharashtra, India**
Software Engineer - Applications **Jan 2019-Jul 2021**

- Coordinated with 12 clients to gather requirements and designed backend REST APIs using JAX-RS implementation of Jersey Framework to cater to the same.
- Identified and fixed 7 security vulnerabilities in application to boost system robustness and resilience.
- Owned and maintained TeamCity builds to automate clean-up of logs and cache, thereby improving the API performance times by 50%.
- Revamped the Test Suites to automate repetitive tasks using a Behavioral Driven Development strategy i.e. Cucumber Framework covering 90% of product features. Initiated and completed functional testing of over 250 features of the application which included close interaction with Amazon Web Service such as S3, EMR, EC2, CloudWatch, Lambda, and API Gateway.

Indian Institute of Technology, Bombay **Mumbai, Maharashtra, India**
Software Developer Intern **May 2018-Jul 2018**

- Devised a framework to map Collaborative Community (CC) architecture to DSpace architecture.
- Leveraged xhtml2pdf library in python to create an application, DSpaceX, that standardized the articles in CC to PDFs. Built automation suites using Selenium for product maintainability purposes.

ACADEMIC PROJECTS

- **Medical Analyzer in AR (M.A.V) -** Vuforia, Unity Game Engine, Numpy, Tensorflow, Keras, OpenCV, Arduino Uno
  Spearheaded development of an Augmented Reality module that allowed the 3D projection of human anatomy to enable doctors to view patient's vitals in a more accurate fashion. Tweaked an object detection module to tailor it towards identifying hospital equipment.
- **AI Smart Mirror Prototype -** Wit.ai, Python, OpenCV, ffmpeg, NLG
  Implemented an AI module to work as a personal smart assistant. Used NLP to establish interaction between humans and AI Bot. Leveraged the service wit.ai to train the bot.
- **Tribal Tourism -** Java, XML, Firebase, Android Studio
  Designed and engineered an android app to promote tourism in tribal areas by tribal people. The idea was to allow any tribe to use the app to promote native localities, business ventures, local homestays, tribal tours, and cultural performances in tribal areas/villages. The project was a part of Smart India Hackathon, 2018 FInals and ranked in the top 10 implementations.
- **Device Automation and Control using ESP8266 -** Arduino Uno, Lua, ESP8266 Wi-Fi module, LM35 Temperature sensor
  Built an IoT-based device using the ESP8266 Wi-Fi module, capable of taking temperature readings and controlling DC motors. Wrote a Lua script to code an Amazon Alexa Skill that would control a conventional light bulb via voice command.

PUBLICATIONS

- Mirr-Active: An Artificially Intelligent and Interactive Mirror - International Conference on Advanced Computation and Telecommunication (ICACAT)
- Amortized Complexity Analysis for Red-Black trees and Splay Trees - International Journal of Innovative Research in Computer Science and Technology (IJIRCST)
- Security in Distributed Systems - Journal of Analysis and Computations (JAC)

LEADERSHIP & INVOLVEMENT

- Headed and managed a team of 6, to compile and publish the technical section of college magazine 'Arceon 2019'