Mehul Shinde

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Education

Carnegie Mellon University Master of Science in Software Engineering   **Expected Graduation May 2021**
GPA: 3.74/4.00

Iowa State University Bachelor of Science in Computer Engineering   **May 2019**
Cardinal Key Honor, College of Engineering Dean's List 2018

Skills

Java, JavaScript, Python, HTML, CSS, Node, React, Angular, SQL, Android, Ionic, Git, Subversion, C#, C, Linux/Unix, AJAX, AWS Lambda, Dynamo DB, Mongo DB, Heroku, AWS Amplify, Firebase, jQuery, Polymer.

Work Experience

Software Engineer Intern | Copart Inc. – Dallas, TX   **August – December 2019**
- Developed APIs and services in *Java* and *Spring* for the Accounting and Revenue Recognition team.
- Designed and implemented proof-of-concept for Batch Data Processing with *Apache Kafka* & *RabbitMQ*.
- Improved number of request queues from 200 to 1 through Batch Data Processing tools and message brokers.

Information Technology Intern | Farm Bureau Financial Services – Des Moines, IA   **August – December 2018**
- Built a client-facing cross-platform mobile application using *Ionic, Angular, and C#*.
- Accomplished security check features in user account authentication process.
- Executed server-side caching to reduce API calls by 90%.

Software Development Intern | Renter Gate – Ames, IA   **May – August 2018**
- Created a web application for a rental-property management start-up utilizing *Polymer, Node, and Firebase*.
- Devised an announcement feature to notify intended audience of an announcement.
- Programmed an automated email generation system for account activities.

Software Development Intern | LESEM Lab, Iowa State University – Ames, IA   **May – August 2017**
- Wrote software for an open-source watershed simulation web-application leveraging the Web Stack (JavaScript, HTML, CSS).
- Constructed a backward compatibility feature to support files from 2 older versions.
- Implemented a report generating functionality to collect simulation data and present it as reports.

Project Experience

Code Smells Detector (Data Science for Software Engineers, CMU)   **August 2020 – Present**
- Working on an individual Code Smells detector application in *Python* with help of Machine Learning algorithms and other Data Science practices.

Recipe Wizard (Start-up - Maai)   **June – August 2020**
- Individually built a web app for a start-up applying Object-Oriented Analysis and other software design principles; and tools such as *JavaScript, React, AWS Lambda, DynamoDB, AWS Amplify*.

Publication Recommendation (Service-Oriented Computing course, CMU)   **March – May 2020**
- Collaborated in a team of 5 on a building a publication repository and recommendation application in *Java* with *Machine Learning* libraries to categories and output appropriate publication meta-data based on user preference.
- Used *Play 2.0* framework to write *REST* API, *MySQL* for storing the publication data, *Apache Lucene* for key-word search, *LDA* for topic modelling, and *Google Maps API* for plotting points on map.

Emergency Social Network (Software Engineering Methods course, CMU)   **January – May 2020**
- Participated in a team of 5 and a community of practice to construct a *React* and *TypeScript* application following different software methods.
- Lead user interaction community and heuristic evaluations of features. Used project tracking tool - JIRA.

Drone Simulator (Senior Design course, ISU)   **August 2018 – May 2019**

- Acted as the Team Lead (of 5 members) to build a drone simulator with *Gazebo*, *ROS*, and *React*.
- Performed image-stitching and terrain mapping with Computer Vision tools - *Open Drone Map*, *Blender* (*Python*).

Anatomy App (Vet Med, ISU)   **January – May 2019**
- Solely performed development of a mobile app in *Angular*, *Ionic*, *TypeScript*, and *Node*. The app served videos, documents, and 3D graphics aiding students in learning canine dissection.
- Coded file caching and storage system to cache files and interactive modules to reduce server API calls from 100 to 1 API call per month.

Smart Farmer (Agronomy Department, ISU)   **August – December 2017**
- Made an android app in *Java* along with *SQL* and *SQLite* in a team of 4 programmers. The app helped farmers track the cost of a crop cycle and collected agriculture and economic data for research at ISU.

SARE Inventory Project (Industrial Engineering, ISU)   **January – May 2017**
- Created a mobile application, individually, to support a research project with *Google Apps Script* to optimize transport of food products in a food network.

Paint Ball Battle (Honorable Mention - Software Development Practices course, ISU)   **January – May 2017**
- Worked in a team of 4 to deliver an android paintball game utilizing *Java*, *PHP*, *libGDx*, and *SQL*. Acted as a Tech Lead and oversaw programming practices and documentation.

Mars Rover (Embedded Systems – ISU)   **January – May 2017**
- Programmed an autonomous rover (in a team of 3) in *C* to navigate an obstacle course based on sensor data. Also wrote an intuitive GUI in *C#* to control rover over Wi-Fi.

CLI chat-box (Winner - HackISU)   **September 2016**
- Participated in a hackathon along with a team of 4 and delivered a CLI for a software engineering collaborating tool - GForge with an in-house API and *Python* (without prior experience).

Leadership Experience

- **Peer Career Consultant (CMU-SV):** Worked along with 4 students to advise and help students with navigating job search.
- **Teaching Assistant (CMU-SV):** Assisted instructor in the Introduction to Graduate Studies course at CMU-SV.
- **President**, **Indian Students' Association (ISU)**: Presided over the second-largest Student Organization at ISU (400 members).
- **Events Coordinator, International Students Council (ISU)**: Organized and oversaw some of the largest events at ISU.
- **Teaching Assistant (ISU)**: Conducted lab sessions for the Digital Logic at ISU.
- **Research Assistant (ISU):** Collaborated in research projects in the Industrial Engineering and the Computer Engineering department at ISU.