

MEHUL SHINDE

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230 Campus Avenue Unit 102,
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EDUCATION

BS Iowa State University, Computer Engineering. May 2019

RESEARCH EXPERIENCE

Undergraduate Research Assistant, Iowa State University, Ames, IA. 2018

Advisor: Dr. Arun Somani

- Developing a solution framework to enable lineage aware data management.
- Using Big Data tools including Spark, MapReduce and Ceph.
- Researching into use of different clustering algorithms.
- Using gem5 as a simulation platform.

Undergraduate Research Assistant, Iowa State University, Ames, IA. 2017

Advisor: Dr. Caroline Krejci

- Developed and deployed a mobile application that helped participants of local food hub network to track products in delivery from producers.
- Wrote back-end script to handle data generated by the app in real time in google apps script.
- Wrote an algorithm to generate node to node routing of the flow of products in a supply chain from available data.
- Co-authored a journal article (manuscript under preparation, to be submitted to International Journal of Physical Distribution & Logistics Management).
- Used technologies such as GoogleAppsScript, ArcGIS and JavaScript.

TEACHING EXPERIENCE

Iowa State University, Ames, IA

Teaching Assistant, Electrical and Computer Engineering Jan 2018 - May 2018

- Taught Lab sections of CprE 281- Digital Logics. Troubleshoot and Debugged Verilog and CAD programs and logic circuits.
- Instructed the use of CAD tools such as QuartusPrime and other tools such as Verilog and VHDL.

Tutor, Academic Success Center Jan 2016 - May 2017

- Tutored COMS 227: Introduction to Object Oriented Programming and MATH 166: Application of Integration to multiple tutoring groups.

PRESENTATIONS AND INVITED LECTURES

Grudens-Schuck, N.; Abu, U.; Li, E.; Shinde, M.; Schulte Moore, L. (2017). People in Ecosystems/Watershed Integration. Iowa Association of Agricultural Educators Summer Conference, Des Moines Area Community College, Ankeny, IA. June 29.

Mittal, A.; White, V. M.; Shinde, M.; Grimm, J.; Krejci, C. C. (2017). Iowa Food Hub Collaboration Network. At the Iowa & Michigan Food Hub Managers Working Group Meeting. May 9 - 10. West Union, IA.

WORK EXPERIENCE

Information Technology Intern- FBL Financials Inc.

Aug – Dec 2018.

West Des Moines, IA.

- Developed and deployed a client facing cross-platform mobile application in an Agile based team setting.
- Programmed and tested backend services for the app that was going to be used by client/members of FBFS.
- Implemented security check procedures in the account authentication part of the mobile app.
- Worked on messaging and 'Request A Quote' features in the app.
- Learned about software-development in corporate environment from various professionals at the company.
- Attended Innovation team meetings and proof-of-concept demos in the company.

Technologies used: JavaScript, AngularJS, C#, .NET, Ionic, NodeJS

Software Development Intern- RenterGate

May – Aug 2018.

Ames, IA.

- Developed a rental-property management software following Agile practices in for of a web application.
- Programmed announcement sorting feature that would sort users as desired by the admin to publish an announcement to.
- Designed and implemented a message chat feature in the tenant and landlord portal.

Technologies used: JavaScript, NodeJS, Polymer, HTML, CSS, Firebase

Android Developer- Agronomy Department, Iowa State University

Aug – Dec 2017.

Ames, IA.

- Developed and deployed an android application, SmartFarmer, used by farmers to track the expenses and decide the rate of their crops. The app also collects data of farmers using the app which is used for research in the department.
- Followed Agile and Test-Driven Development practices in a tam environment while developing the application.
- Designed and developed local and remote sets of SQL databases, which records data and calculates prices even when offline.
- Wrote a RESTful service for the app to communicate with Apache Tomcat server hosted on AWS.

Technologies used: Java, SQL, SQLite

Software Development Intern- LESEM Lab, Iowa State University May – Aug 2017.
Ames, IA.

- Developed and deployed a version 3.0 of ‘PEWI’ an open source simulation web application for watershed management.
- Designed and programmed a file integration feature to make files from outdated versions compatible with latest version using file manipulation of type JSON and CSV.
- Implemented a report generation function which produced a customizable report for the users of the simulation as a printable pdf.

Technologies used: JavaScript, HTML, CSS, JSON

PROJECTS

Drone Simulator Fall’18 (Team Lead): Team lead for development of a drone simulator web-application using ROS, Gazebo, ReactJS and C++.

Data base handling script for a food hub in Michigan: Wrote back-end script to automate order list and customer information management using Google Apps Script for Sprout (a food hub in Michigan), which saves about 2 hours of the managers’ time for every order cycle.

Android Game development (Honorable mention): Developed a multiplayer 2d android game in a team of 4 as a part of software development project course. Acted as the Technical Lead of the team. Used Java, XML, libGDX, PHP and MySQL to handle server client connections, database and game play.

Command line in chat box, HackISU Fall’16 (Winners): Used GForge API to implement a command line feature to perform any operations which could be done on the UI.

COMMUNITY INVOLVEMENT

President

Indian Students’ Association, Iowa State University, Ames, IA.

Event Coordinator

International Student Council, Iowa State University, Ames, IA.

Participant

IEEE Iowa State University Chapter, Iowa State University, Ames, IA.

SKILLS

Operating Systems

Linux, Windows, & ROS.

Web Development

JavaScript, HTML, XML, CSS, Node, Angular, React, & Polymer.

Programming Languages

Java, Python, C, C#, SQL, &.NET.

Mobile Development

iOS, Android, & Ionic.

Version Control

Git, & Subversion.

Big Data

Spark, Ceph & Pig.

Simulation tool

Gem5.

REFERENCES

Dr. Arun Somani, Associate Dean for Research, College of Engineering
Distinguished Professor of Elect. & Comp. Eng.
Philip and Virginia Sproul Professor
Electrical and Computer Engineering
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Industrial and Manufacturing Systems Engineering
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Natural Resource Ecology and Management
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