Mr. Sudarshan Vankudre
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TECHNICAL SKILLS

Languages	Python, Java, C, Javascript, HTML5, CSS, Shell scripts, Scheme, RISC-V
Operating Systems	Linux, Windows, MacOS
Tools & Technologies	Pycharm, IntelliJ, Eclipse, Vim, Git, SQL, Maven, Dropwizard, Elasticsearch, Kibana, Grafana, Bootstrap, Google Chrome debugger, Postman, JUnit, Mockito, Jupyter Notebook, scikit-learn, NumPy

EDUCATION

- **BA Computer Science** - UC Berkeley

WORK EXPERIENCE

IndusIntel - San Jose, CA **May 2019 - Aug. 2019**

Software Engineering Intern

About: IndusIntel is an industrial IoT company, focusing on digitizing the manufacturing process to provide insights into machine performance, helping to increase process efficiency.

(a) REST API backend development

Users: IndusIntel Dev Team, Lockheed Martin, etc. (future clients)

Summary: Added several services to the product platform used by both clients and the IndusIntel development team to increase productivity and improve user experience.

- Implemented file sharing between client and server.
- Created terminal emulator for development team to speed up remote access to servers.
- Added patching software to automate patching for development team.

Technology: Java, Javascript, Dropwizard, Maven, Bootstrap, JQuery, Bash

(b) Time series data processing

Summary: Used unsupervised learning to process large amounts of machine data.

- Pulled time series data from the cloud and developed models to detect anomalies.
- Pushed data labeled as normal/abnormal to the cloud.
- Integrated labeled data stream with visualization software, giving users a dashboard with insight into machine performance.

Technology: Python, Elasticsearch, Kibana, Grafana, scikit-learn, NumPy

(c) Testing

Summary: Created suite of unit tests for platform source code. Helped to onboard incoming intern.

Technology: Java, JUnit, Mockito

CS61A 2018 **Jan. 2018 - May 2018**

Academic Intern

About: CS61A is the introductory computer science course in the major. It covers different programming paradigms such as object oriented, functional, and declarative.

- Helped students in office hours understand course content.
- Assisted in running lab sections.

PROJECTS

Shape from Stereo **Sept. 2018 - Oct. 2018**

Summary: Generated depth map from two images from left and right cameras to be able to understand depth, similar to how the human eyes look at the world. Used vectorization and multithreading to parallelize code, increasing performance by a factor of 13.

Technology: C, OpenMP, SIMD

Grigometh Hunters **Feb. 2018 - April 2018**

Summary: Created arcade maze game in which player travels through randomly generated worlds, capturing monsters. Used serialization to save game state.

Technology: Java, Git

Project SIXT33N **Jan. 2018 - May 2018**

Summary: Designed and built model car that was trained to respond to several voice commands to move forwards, backwards, turn right, turn left, etc.

Technology: Python, Jupyter Notebook, circuit elements

Scheme Interpreter **Nov. 2017 - Dec. 2017**

Summary: Created Python interpreter for Scheme, a subset of the Lisp programming language. Used read, eval, print, loop technique to do this.

COURSEWORK

Computer Science	Data Structures, Efficient Algorithms and Intractable Problems, Great Ideas in Computer Architecture (Machine Structures), Introduction to Artificial Intelligence, Designing Information Devices and Systems (I & II), Probability and Random Processes, The Structure and Interpretation of Computer Programs (CS61A)
Mathematics	Linear Algebra, Introduction to Analysis, Multivariable Calculus