DEVANSH JAIN

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EDUCATION

Indiana University, **Bloomington, USA** Master of Science, Computer Science GPA: 3.7/4.0 **May 2021**
Rajiv Gandhi Proudyogiki Vishwavidyalaya, India Bachelors, Computer Science GPA: 3.4/4.0 **May 2018**

TECHNICAL SKILLS

Coursework: Cloud Computing, Distributed Systems, Operating Systems, Computer Architecture, Virtualization, Artificial Intelligence **Languages:** C, C++, Python, JAVA, SQL, Node JS **Web Design:** HTML, CSS, JavaScript, React JS, Angular JS **Platforms:** Amazon Web Services (CSA Track), Google Cloud Platform, Kubernetes, Docker Containers, RabbitMQ, Apache MapReduce, Apache Spark, Jetstream, Jenkins, Travis CI **Operating Systems:** Microsoft Windows, XINU, LINUX, and DOS **Tools:** VMWare, GitHub, Jira, Adobe Illustrator, Adobe Photoshop, Adobe Premiere Pro, Corel Draw

WORK EXPERIENCE

Secondary Cities Initiative, Indore, India Software Associate **October 2018- July 2019**

- Implemented a web and mobile application using React JS and React Native, using open-source ODK library, for GIS Field Data Collection in an agile environment utilizing a test-driven development approach.
- Developed tool to generate various dynamic reports such as monthly timesheets, variance reports, and data analytics reports and worked across teams to stabilize the data collection and came forth with effective database design and implemented it Node JS and MySQL.

Reclaim Internet Project Indore, India Dev Intern **October 2017- January 2018**

- Designed a computational model for sentiment analysis in python environment to measure the perceived toxicity of online social media content and visualized the analysed data.
- Developed a Google Chrome Extension which enabled the users to flag any hate speech they encounter on the web.
- Implemented the frontend using React JS for the website and used Two-Factor Authentication using time-based one-time passwords (OTP, Google Authenticator).

PROJECTS

Distributed Weather Application | Jetstream, Kubernetes, Docker, RabbitMQ, Jenkins, RESTful, JAVA, Node JS, MongoDB **April 2020**

- Developed a highly available, fault-tolerant and micro-service architecture based web application that visualized radar data using the AWS NEXRAD weather data set, with containerized RESTful micro-services.
- Orchestrated all micro-services through Kubernetes and CI/CD using DevOps tool, Travis CI and Jenkins.
- Implemented front end micro-service in React JS, back end micro-services in Node JS, Mongo DB & Python, and queue messaging service, using Rabbit MQ and created API Gateway as micro-service in JAVA.
- Pushed the web application to production in Jetstream Cloud Environment using OpenStack API.

Map Reduce Framework | Google Cloud Platform, GCloud API, Docker, Socket Programming, JAVA, Python, RESTful **November 2019**

- Designed, implemented and deployed highly available Distributed MapReduce Framework to production on Google Cloud Platform for processing and generating big data sets with a parallel, distributed algorithm on a cluster.
- This framework could be used as a "library" by higher-level applications for big data processing using a well-defined REST API. Implemented master, and the mappers-reducers as micro-services running separately on multiple VMs.

File System, System Calls & Shell CMD | XINU, Shell Scripting, C, Futures, Shell CMD, Process Synchronization **March 2020**

- Created system calls, shell commands, implemented a synchronisation mechanism between threads, created a stream processing system and network communication in XINU Operating System.
- Implemented the in-memory file system that was modelled after the ext2 file system using filesystem structures, functions to manipulate blocks and core system calls to interact with the file system in XINU Operating System.

Memcached Lite | AWS, EC2, Docker, Socket Programming, Python, RESTful **October 2019**

- Implemented a mimic of a Memcached, a popular key-value store, which could handle multiple clients and respond to their requests concurrently and synchronously, that was deployed on AWS and tested with auto-scaling groups.

2048 Game Playing AI | Python **November 2019**

- Using adversarial search algorithms, MinMax, Expecti MinMax, Alpha Beta Pruning, developed an AI bot that could play against and beat a human in a two-player 2048 tile game, achieved the first position in the class tournament.

Flag-It- Google Chrome Extension | JavaScript, HTML, MongoDB, Python, Chrome API **October 2017**

- Designed and implemented a Google Chrome Extension, which enabled the users to flag any sort of extremist content they encounter on social media or web, this URL, then was directly reported to the Local Authorities.

LEADERSHIP AND INVOLVEMENT

- Represented India at a workshop which aimed to enhance the technological contribution in countering violent extremism in Levant Nations, organized by NESA-National Defence University, USA.
- Participated in the Secondary Cities'2019 Asia Hub Technical Exchange Workshop organized by US Department of State and Kathmandu Living Labs, Nepal.