SHASHANK SAXENA

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▶ EMPLOYMENT

GSI · Software Architect Intern | Champaign, IL
Nov 2017 to Current
- Created a test environment for internal web developers that interfaces with the GSI Edge controller
- Architected an in-house distributed mini-cluster to using socket programming + I/O pins
- Used Node.js, Raspberry Pi (GPIO), Python3 - made from scratch

Capital One · Data Engineering Intern | Champaign, IL
May 2017 to Oct 2017
- Designed scalable architecture and database schemas for use with existing Capital One technology
- Implemented a 4-way pipeline to process big data and served content through RESTful web API
- Worked with Apache Kafka, Accumulo, Spark, and Flask

Reconstruct · Software Engineering Intern | Champaign, IL
Sep 2016 to Dec 2016
- Worked in the initial stages of startup that dealt with visualizing construction sites
- Maintaining backend server that serves as a portal to the website
- Used Node.js, AWS S3, and GitHub

AllState · Application Developer Intern | Northbrook, IL
May 2016 to Aug 2016
- Automated a large chunk of the processing of policy information
- Worked mostly on internal web apps (backend)
- Used C# and XML in Visual Studio along with SQL Server Management Studio with LINQ queries

StateFarm · Software Engineering Intern | Champaign, IL
May 2015 to May 2016, May 2015 to May 2016
- Implemented an internal Windows application that let marketers keep track of incoming customers
- Used VB.NET and Microsoft's Jet engine
- Updated and completely reworked internal website for interns
- Used MEAN stack with backend focus

▶ PROJECTS

SDFS - Simple Distributed File System
- Created a fault-tolerant distributed file system from scratch
- Intended to simulate how files are stored "in the cloud"
- Used Java and 10 virtual machines all connected on the same network

phoneify - Open Source Contribution
- Built an npm module that would ease parsing of US phone numbers in different formats
- Over 1000+ downloads

Riskulizer - Hackathon (2nd Place Winner)
- Developed backend to app that visualized data from calamities and displayed affected areas
- Goal was to convert data into a visualization (around 100k+ data points)
- Used Flask as a RESTful API service, and various front-end graphing libraries in JavaScript

MangOS - Team Project
- Designed a Linux kernel from nearly nothing
- Implemented file systems, hardware initializations, execute/halt, interrupts, and scheduling
- Used C and x86

VRMD - Subteam Lead Developer
- Updated VR project dealing with safety awareness training focusing on laparoscopic and heart surgery with human body
- Used Unity, C#, and the Oculus SDK with Oculus Touch integration

HomeFront - Notable Mention
- Created a Pebble smartwatch that receives the status of your home based on sensor information
- Used CloudPebble with Pebble.js and AllState's Internet of Things (A6) API

▶ EDUCATION

University of Illinois
Urbana-Champaign
B.S. Computer Engineering
May 2018
U.S. Citizen

▶ SKILLS

PROFICIENT WITH
Java
C++
C
x86
Python
JavaScript
Node.js
HTML/CSS
VB.NET/C#

FAMILIAR WITH
SQL/NoSQL
Swift
MATLAB
Apache Kafka
Apache Spark
Apache Accumulo

▶ COURSE

Signal Processing
Artificial Intelligence
Text Information Systems
Virtual Reality
Computer Systems Programming
Data Science
Machine Learning
Distributed Systems
Operating Systems

▶ ACTIVITIES

Chair of SIGVR
ACM@UIUC - Exec Member