Sankruth Kota

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EDUCATION

University of Illinois at Urbana-Champaign   Aug 2017 - May 2021
Bachelor of Science in Computer Engineering
- **Relevant Coursework:** Applied Parallel Programming, Operating Systems, Distributed Systems, Applied Machine Learning, Computer Security, Database Systems, Digital Systems (FPGA)

PROFESSIONAL EXPERIENCE

Oracle   July 2021 - Present
Software Engineer (Performance, Scalability and Reliability Team)
- Improved the performance of Oracle Analytics for Applications (OAX) by bundling groups of requests to be sent out as batches
- Optimized a set of benchmark query execution times (TPCDS) against Oracle Big Data Services clusters on Hive, and Spark by developing a set of optimal tunings to be deployed in future releases as out-of-the-box
- Developed a script to collect metrics such as CPU utilization, disk I/O etc and display them on a dashboard

Cargill   Jan 2021 - May 2021
Software Engineering Intern
- Built a dashboard for the quant team in **React** and **MongoDB** and deployed this application through **Docker**
- Set up **socket data streaming** to simulate the appearance of real-time data to test our dashboards
- Worked with UI/UX team members to ensure that the dashboard delivered the correct experience for the team

Oracle   May 2020 - Aug 2020
Software Engineering Intern (Performance, Scalability and Reliability Team)
- Conducted client-side and server-side breakdown of Oracle Analytics for Applications (OAX) to recognize performance and scalability bottlenecks
- Improved OAX load time by 1.8x (5s to 3s) by loading sets of KPI cards sequentially
- Performed scalability tests using **JMeter**, after deploying the improved application on a **WebLogic Server**, to guarantee proportional resource consumption

Capital One
Software Engineering Intern   May 2019 - Aug 2019
- Focused on detecting changes in data that could prevent machine learning models from making accurate predictions and polluting data (data drift/concept drift)
- Tracked model decay of a **support vector classification** model for data drift and implemented automated model adaptation features to maintain high prediction accuracy
- Developed an ensemble machine learning pipeline, combining model adaptation and statistical detection, using **scikit-learn** to keep machine learning models robust

John Deere, Intelligent Solutions Group
Information Technology Intern   May 2018 - Aug 2018
- Added the ability to log contextual metadata asynchronously, by implementing **thread-local storage** based on chains of callbacks in **Node.js**
- Implemented a cleansing process by parsing and converting logs to an acceptable format for long-term storage in **Elasticsearch**

SKILLS

Languages: Python, Golang, C/C++, Javascript (Node.js), Java, SQL, HTML/CSS, CUDA, System Verilog
Tools: Hadoop, Spark, MongoDB, Neo4j, SQL, Data/ML Python libraries, JMeter, Elasticsearch, Logstash, Kibana, Django, Git, Jenkins Pipeline, TDD/BDD