DURGA DARBA

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GITHUB | LINKEDIN | PORTFOLIO

WORK EXPERIENCE

J.P. MORGAN CHASE   *Software Engineer II | Chicago, IL | Aug 2021 – Current*
- Improved database concurrency conflicts by 87% by creating an auto resolution process written in Python. Created project visualization using Splunk dashboards to map recurring conflicting objects to applications and owners.
- Improved security by resolving 1500 daily running jobs creating unpermissioned objects in internal NoSQL database. Maintained internal reporting tool using Grafana.
- Modernized web proxy by implementing proxy forwarder across 4 major geographically load-balanced regions and spearheaded Athena Credit migration to new pattern while consistently monitoring system health and stability.
- Streamlined large-scale datacenter migration of 10,000+ jobs by building a versatile host tester analytics tool in Python.
- Created a Sales Matching Engine REST API in Java with TIBCO Messaging that corrects and matches sales data, in real time, between sales and investment LOBs.
- Mentored new hires to streamline the onboarding process and presented time-wide knowledge transfer sessions.

FIDELITY INVESTMENTS   *Software Engineer | Remote | March 2021 – August 2021*
- Developed Benefit Calculation Engine in Java that gives users access to pension calculations for 100+ major clients.
- Led periodic performance test of SQLMI database using various runtime metrics and updating SQL stored procedures.
- Improved Defined Benefits system by migrating 8 Sybase clones to 1 SQLMI instance.

YANMAR - AMERICA   *Full Stack Software Engineer | Remote | May 2020 – February 2021*
- Authored a React Native frontend app that allows customers to see nearest of 300+ dealer locations in the United States.
- Reached a customer base of 15,000 by working with Marketing to send customized deals using various data analytics.
- Developed an external API using AWS Lambda, S3, and Google Cloud Platform to create GPS functionality and communicate user-inputted data.
- Architected a serverless backend that allows mobile app to dynamically pull dealer and user information.

BLUECROSS BLUESHIELD   *Full Stack Software Engineer | Eagan, MN | May 2019 – May 2020*
- Optimized onboarding process from 4 days to 15 minutes by creating internal automation written in Bash, Python, and Java.
- Engineered search engine in Python and React to match 650 benefits to health conditions by implementing Gradient Descent.
- Redesigned and maintained workout app using React, Redux, and React Native and built its backend in Node.js.
- Overhauled system of on prem resources by helping migrate various LOBs to AWS and Git Lab.

CERTIFICATIONS

AWS Cloud Practitioner, AWS Associate Developer

SKILLS

Languages: *Python, Java, C++, React.js, Node.js, Bash (Linux /Unix), JSON, SQL, Git*
Frameworks: *Pandas, Jupyter, Numpy, Flask, Spring Boot, JUnit, Redux, AWS, Google Cloud, REST*
Database: *Postgres, NOSQL (Hydra), MySQL, SQLMI,*
CI/CD: *Docker, Kubernetes, Jenkins, Jules, Git, Splunk, Grafana*
Proficiencies : *Object Oriented Programming, Data Visualization, Largescale Systems Design & Architecture, Networking*

EDUCATION

GEORGIA INSTITUTE OF TECHNOLOGY   *Atlanta, Georgia | 2023 - Current*
MS Computer Science
Coursework: *Machine Learning for Trading, Artificial Intelligence, Game AI, Ed. Technology*

IOWA STATE UNIVERSITY   *Ames, Iowa | 2016 - 2020*
BSc Computer Engineering, Minor Economics

OPEN SOURCE

Q- LEARNING ATARI BOT
- Implemented Q Learning, artificial intelligence, algorithm to play retro Atari games like Pong, Tennis, Boxing, and Adventure.
- Optimized performance by vectorizing code using the Pandas and Numpy libraries and trained using Pytorch.
- Maximized success rate over 10,000 generations by measuring and charting hyperparameters, such as alpha and random action rate, over rolling 5-episode average and total average.
- Actively participating open-source community design reviews, pull requests, and providing general direction to newcomers.

ALGORITHMS VISUALIZER
- Implemented artificial intelligence algorithms in C++ to imitate various emergent life behaviors.
- Leveraged the Spotify API to stream player data, enabling real-time display of album covers when music is played on external devices.