Dobson Dunavant

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Education

Bachelor in Computer Science, College of Charleston, 3.8 GPA   expected May 2024

Bachelor in Accounting, College of Charleston, D1 Soccer Player   Dec 2017

Experience

Robotics & Machine Learning Co-Op, Mercedes-Benz – Ladson, SC   Sept 2023 – Present

- Led team of four to develop an autonomous drone inventory system using Tesseract OCR and YOLOv8 for real-time, small-part tracking in industrial settings to enable inventory awareness and supply-chain analytics
- Implemented onboard edge computing on Raspberry Pi drones, enabling autonomous inventory management with WebSocket connections to AWS and SAP
- Authored SRS and feasibility reports, clearly defining functional and non-functional requirements
- Achieved 98% inventory accuracy and SAP integration, delivering a fully end-to-end solution, significantly surpassing the existing accuracy and efficiency benchmarks

Software Engineering Intern, Savvas Learning Company – Phoenix, AZ   May 2023 – Aug 2023

- Developed full-stack solutions for Savvas Realize, a large-scale K-12 ed-tech platform using Angular 16 MFEs, Apollo, GraphQL, RxJS, Spring, PostgreSQL, and Jest
- Resolved 9 high-priority Jira tickets, contributing to sprint goals as part of an Agile team
- Led two hackathon projects: Enhanced API test coverage by 26% using Karate, measured by JaCoCo metrics, and developed a PowerBI student analysis dashboard, both now in production
- Created an all-in-one Confluence knowledge hub, covering day 1 onboarding guides to custom micro-frontend build steps, improving resource accessibility for new and experienced developers

Data Engineering Intern, Fiscal Spreading & Tracking – Charleston, SC   Sept 2022 – Jan 2023

- Transitioned from a monolithic desktop app to a serverless microservice web app using React, Django, PostgreSQL, and AWS services (Lambda, S3, RDS), enhancing system efficiency and scalability
- Reduced server load by 17% through optimizing and refactoring APIs, streamlining query logic, and data caching
- Containerized key data processing tasks with Docker, including ETL operations and credit scoring algorithms, to segregate responsibilities and mitigate single-point failures, thereby increasing system reliability

Sales Engineer & Scrum Master, Ceterus – Charleston, SC   Mar 2018 – Mar 2021

- Developed technical solutions for over 125 clients by translating complex technical features into tangible business benefits, leading to increased sales and enhanced customer engagement
- Achieved a domain-high 23% year-over-year increase in customer retention by conducting regular feedback sessions and personalized follow-ups, leading to stronger client relationships and improved service satisfaction
- Overhauled documentation with small-business tax compliance, accounting, and payroll best practices, standardizing workflow processes and reducing manual knowledge-sharing needs

Skills

Languages: Python, SQL, Java, TypeScript, JavaScript, C, C++, Dart, HTML, CSS
Frameworks: Angular, React, Flutter, Next.js, Spring, Django, Flask, Express.js, Node.js
Libraries: Apollo, Axios, Prisma, Jest, RxJS, OpenCV, TensorFlow, pandas
Developer Tools: AWS, Firebase, Docker, WebSocket, GraphQL, PostgreSQL, MongoDB, Git