Andrew Lee

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EXPERIENCE

Lockheed Martin, King Of Prussia, PA

Software Engineer

February 2024 - Present

- Revamped and extended a React/Typescript UI for data transfer software, reducing operator training by 30% and support tickets by 50% through rapid bug fixes during critical demos.
- Designed and implemented Java services to enhance system operations, including simplifying network configuration, automating heartbeat log management, analyzing failed transmissions, and dynamically controlling database user access.
- Collaborated with hardware and systems engineers to redesign the backend/frontend system architecture, improving performance and enhancing security measures to meet strict industry guidelines.
- Experience provisioning server racks and air-gapped systems with custom Ansible scripts to deploy the web application, reducing manual efforts and minimizing the risk of configuration errors.

Associate Software Engineer

February 2022 - February 2024

- Created simulators for interconnected satellite systems in Java. Enabled dynamic addressing and accurate heartbeats, resulting in faster development of dependent applications throughout various sprints.
- Designed data transformation applications in Python, handling AMQ messages and broker integration, facilitating efficient ETL processes and data model creation using Protobuf/Pydantic.
- Served as Scrum Master, leading Agile processes in data-intensive projects, coordinating team collaboration, removing impediments, and ensuring timely delivery of high-quality software within sprints.

Associate Data Engineer

June 2021 - February 2022

- Visualized geospatial communication metadata using ElasticSearch and Kibana. Presented these dashboards to potential customers.
- Wrote well-tested and documented code in an agile environment, utilizing Helm, Docker, Rancher, ArgoCD to deploy containerized, scalable applications via Gitlab CI/CD pipelines.

Protochips, Morrisville, NC

June 2016 - August 2018

Technician

- Programmed and assembled precision Arduino-based controllers for electron microscope holders.
- Collaborated with a small team of engineers over three summers, taking on increasing responsibilities.
- Assisted with presenting products to potential clients.

SKILLS

Languages: Python, SQL, Java, Typescript

React, Ansible, Springboot, Node.js, AWS, PySpark, Git, PostgreSQL, Pandas, FastAPI, Gradle, ActiveMQ

EDUCATION

University of Richmond, Richmond, VA

May 2021

Bachelor of Science, Mathematical Economics

Minor, Computer Science

Relevant Coursework: Machine Learning, Advanced Econometrics, Business Statistics, Probability, Linear Algebra, Financial Accounting, Financial Management, Software Systems Development

LEADERSHIP

Data Science Club, University of Richmond

President, Founder

- Set and moderated goals for the club, oversaw the creation, and recruited new members.
- Coordinated biweekly meetings, datathon competitions, and data scientist speakers.

Economics Society, University of Richmond

Senior Member

- Participated in monthly meetings to discuss recent economic changes and modern theories.
- Got to know my professors and classmates better.

PERSONAL PROJECTS

Vidmatic.io Platform January 2024

Full Stack Developer/Founder

- Developed software delivering highly accurate and video captions/editing tools simplifying engaging and stylized captions with timestamps and confidence intervals.
- Technologies: Frontend: Typescript, React, Redux; Backend: Python, FastAPI, Pydantic;

Personalize AI Model using iMessage Data

Built a Python-based pipeline using Pandas for extracting and preprocessing iMessage conversation data.