Jeff Cuartas

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EDUCATION

Northeastern University, Portland, ME   Expected May 2024
Master of Science in Computer Science   GPA: 4.0
Related courses: Object Oriented Programming, Algorithms, Web/Mobile App Development, Machine Learning, Databases

Bowdoin College, Brunswick, ME   December 2016
Bachelor of Arts, Asian Studies

PROFESSIONAL EXPERIENCE

Amazon Web Services (AWS), Boston/Hybrid   May 2023 – August 2023
Software Development Engineer Intern
- Designed a priority queue system as a cloud solution for AWS key service, leading to improved efficiency.
- Implemented priority queue cloud solution through a microservices approach using AWS core services SQS, EC2 and S3 via AWS Java SDK, enhancing system performance.
- Developed and performed manual, unit, and integration testing for new cloud feature, to ensure the reliability of the new cloud feature.

UNUM, Portland, Maine/Hybrid   January 2023 – May 2023
Software Development Engineer Co-op
- Conceptualized and designed an internal full-stack web application to enable end users with data retrieval capabilities, facilitating the tracking and management of proprietary software usage.
- Integrated Restful APIs with React frontend, resulting in a highly responsive and user-friendly interface.
- Implemented unit tests to validate and enhance the functionality and reliability of frontend features, contributing to the overall quality of the software solution.

Roux Institute | Northeastern University, Portland, Maine   February 2022 - August 2022
Teaching Assistant, Introduction to Computer Science (5001), Data Structures and Algorithms (5008)
- Prepared and led weekly recitations, provided code feedback and debugging in C/Python, and graded assignments.

PROJECTS

BankChurn IQ, *Machine Learning Web App | Python, Scikit-Learn, Flask*   March 2024 – March 2024
- Engineered a predictive model using machine learning techniques to forecast customer churn within the banking sector, leveraging Python and Scikit-Learn, resulting in actionable insights for proactive customer retention strategies.
- Architected and developed a comprehensive full-stack web application utilizing Flask, providing an intuitive interface for users to access churn predictions seamlessly.
- Achieved significant enhancements in model performance through hyperparameter optimization, leading to an accuracy rate of 80% and precision rate of 75%.

FleetCart, *Ecommerce Website Deployment | AWS*   December 2023
- Deployed and hosted a highly available ecommerce website using EC2, RDS, Route 53, Auto Scaling Group and Virtual Private Cloud (VPC) for secure network architecture.
- Engineered automated scaling mechanisms using AWS Auto Scaling, ensuring seamless handling of varying traffic loads and enhancing overall system reliability.

EBirder, *Birding Web Application | JavaScript, React, Node.JS*   October 2022 – December 2022
- Conceptualized, designed, and implemented EBirder using JavaScript technologies, including React, Express.js, and Node.js and a NoSQL (mongoDB) database for a comprehensive birding application.
- Employed MVC architecture, implemented robust user authentication, and integrated the eBird API for real-time birding data, enhancing user engagement and data security.

TECHNICAL SKILLS & CERTIFICATIONS

Languages: Java, Python, C, JavaScript, Swift; **Cloud:** AWS; **Backend:** Node.js; **Database:** SQL, NoSQL; **Web:** HTML, CSS, React; **Data Modeling:** LucidChart; **OS:** Linux; **Concepts:** Virtualization**,** Agile, Microservice Architecture; **Version Control:** Git; **Certifications:** AWS Certified Cloud Practitioner