Michael Mapanao

253-600-8319 | michael.mapanao@gmail.com | linkedin.com/in/michael-mapanao/ | github.com/BaptizedLion

EDUCATION

University of Washington — Tacoma, WA
Bachelor of Science in Computer Science and Systems — *Jan 2022 – Aug 2025*

EXPERIENCE

Cloud Support Associate Intern — Seattle, WA
Amazon Web Services — *May 2025 – Aug 2025*
- Developed and deployed an AI-powered chatbot using AWS Lex and Bedrock, reducing OpenSearch cluster diagnostic support cases and improving response time.
- Engineered two Python-based Lambda functions for real-time OpenSearch cluster health monitoring, achieving reduction in diagnostic time and handling multiple requests per day.
- Architected DynamoDB database solution to optimize chatbot performance, resulting in reduction in API latency and enhanced data analytics capabilities for daily customer interactions.
- Implemented client-side encryption for DynamoDB using AWS Key Management Service (KMS), ensuring secure data-at-rest protection and compliance with data privacy requirements.
- Leveraged Amazon QuickSight to create interactive dashboards for monitoring chatbot metrics, leading to improvement in bot response accuracy and customer satisfaction.

Performance Assessment Representative — Port Hueneme, CA
United States Navy — *Jan 2014 – Dec. 2021*
- Managed 20+ multimillion-dollar construction and service contracts, conducting site visits, performance assessments, and safety inspections to ensure compliance with OSHA and EM 385-1-1 regulations.
- Supervised and supported cross-functional teams of up to 13 personnel, filling critical gaps in administrative roles, handling 40+ personnel transactions and reimbursements, and ensuring timely on boarding and pay for military.
- Ranked 3 of 17 Petty Officers for top performance and leadership, volunteering 60+ hours to Navy events and leading fundraising efforts that generated over $3K to support morale and welfare initiatives.

PROJECTS

Transform-Load-Query Pipeline | *Java, Python, AWS Lambda, AWS S3, AWS Aurora* — Nov. 2024 – Dec. 2024
- Contributed to the implementation of serverless application that used three lambda functions.
- Developed Lambda functions for Transform, Load, and Query stages processing cloud-based datasets.
- Conducted comprehensive performance evaluation of data processing pipelines implemented in Java and Python using AWS cloud services.

Textbook Price Comparison | *JavaScript, Node.js, Express.js, MySQL, Pug* — Jun. 2024 – Jul. 2024
- Lead development of a dynamic web application for real-time textbook price comparison across vendors.
- Implementing full-stack solution using JavaScript and MySQL to create a scalable and efficient platform.
- Designed and optimized database queries to handle large datasets of textbook information and pricing data.

2D Matrix Dungeon Crawler | *Java, JavaFX, JUnit 5, UML* — Jan. 2024 – Mar. 2024
- Implemented maze generation, character movement, random item generation, and inventory system.
- Tested character behavior, combat system, game loop, and end state of game with JUnit 5.
- Documented project with software requirements specifications outlining main objectives and object hierarchy.

Craps Game Simulator | *Java, Java Swing, JUnit 5* — Nov. 2023 – Dec. 2023
- Developed a Java-based Craps game simulator, showcasing object-oriented programming principles.
- Used Model-View-Controller (MVC) pattern to ensure separation of concerns and code maintainability.
- Implemented Singleton and Observer design patterns to optimize resource management and enable real-time UI updates.

TECHNICAL SKILLS

Languages: Java, Python, C, SQL, JavaScript, HTML/CSS, R
Frameworks: Node.js, Express.js, JUnit
Developer Tools: Amazon Lambda, EC2, S3, Amazon Lex, Amazon Aurora, Git, VS Code, Visual Studio, IntelliJ, Eclipse, Java Swing, JavaFX
Certificates: AWS Solutions Architect Associate, AWS AI Practitioner