Colton Klable

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Education

Bachelor of Engineering - Computer Science *University of Colorado Boulder* **December 2023**
Minor of Applied Science - Mathematics *University of Colorado Boulder*

Experience

Software Engineer I, Travelport – Denver, CO **May 2023 – Present**

Java | Spring | SQL | Docker | Agile (SAFe) | Atlassian Products | TDD

- Architected and delivered a Springboot API with Test-Driven Development methodologies, adding pivotal intelligence and automation capabilities to the CI/CD pipeline by offering CRUD operations to Katalon test suites.
- Transformed the preproduction life cycle by migrating sequential processes from company machines to Docker containers, permitting parallel execution and slashing the duration to 1/N.
- Stepped up during a Program Increment planning to lead a team of 5 engineers, adeptly navigating a crisis using fortified agile practices. Led sprint planning, backlog refinement, stand-ups, and retrospectives.

DevOps Engineering Intern, Travelport – Denver, CO **May 2022 – May 2023**

JavaScript | GitHub Actions | MERN | SQL | Agile (SAFe) | Atlassian Products | TDD

- Developed a proof-of-concept dashboard using React, Express, and Node.js, bolstering monitoring capabilities for CI/CD pipeline.
- Successfully scaled GitHub workflow to optimize the CI/CD pipelines for 11 distinct teams, streamlining development processes and ensuring consistent deployments.
- Identified a gap in GitHub's native capabilities, and in response, engineered a custom GitHub Action using JavaScript to emulate key Jenkins functionalities, allowing an entire Agile Release Train to move towards a new standard.

Skills

Methodologies	Agile (SAFe) | Test-Driven Development | DevOps | Object Oriented Development
Technologies	Spring | React | Express | MongoDB | Node.js | Docker | GitHub Actions | PyTorch
Languages	Python | Java | C++ | JavaScript | Golang | SQL | Swift | C# | C

Projects

GroceryBot - Autonomous Robot Shopper **January 2023 - May 2023**

- Harnessed blob detection algorithms for precise real-time object identification and localization, augmented by image transformations and HSV color space masking.
- Integrated a Rapidly-exploring Random Tree algorithm for efficient multi-goal navigation using dynamic node exploration, linear interpolation, and collision detection.
- Incorporated high-level linear algebra techniques to transition RRT-derived 2D trajectories into a 3D environment, facilitating robotic motion through inverse kinematics.

DoomAI - Hunting Demons Using Deep Q-Learning **June 2023 - August 2023**

- Translated raw pixel data from the video game “Doom” to a digestible format for an AI agent using a deep convolutional neural network
- Boosted training convergence by integrating experience replay for more stable learning and target network updates to mitigate the issue of moving Q-value targets.

GoFish - User Driven Fishing, Hunting, and Cryptid App **January 2022 - April 2022**

- Built a React and Node.js platform for enthusiasts to upload, describe, and geotag media content, enhancing pre-adventure planning.
- Employed MongoDB with sophisticated JavaScript filtering to let users customize map views based on diverse criteria, from fish size to cryptid type, elevating user engagement and discovery.

Cyber Suite - Collection of Python Scripts for Penetration Testing **August 2023 - December 2023**

- Developed a collection of Python scripts for network and security tasks, including brute-forcing web logins, discovering directories, and managing remote shells.
- Engineered and tested scripts for port scanning and reverse shell operations, using Python libraries like `requests` and `termcolor` to handle network communications and provide user-friendly outputs.

Certifications

Google Cybersecurity Certificate **April 2024**
Security+ **In-Progress**