Matthieu Tran

matthieuktran@gmail.com | +1 (714) 717-5640 | https://matthieu.codes/

TECHNICAL EXPERIENCE

Web Application Programmer Intern   April 2019 - April 2022
Siemens Digital Industries Software — Cypress, CA

- Formulated a DOCX to HTML tool by implementing a recursive breadth-first searching algorithm (BFS) to parse a Microsoft Word document's XML tree data, displaying over 8,600 documents online.
- Standardized the documentation view for the various products in the company's diverse portfolio.
- Automated the staging and production cache purging requests by utilizing the Akamai Fast Purge API and increased the rate of closed requests by 120%.
- Debugged issues with internal applications and created appropriate incident reports in JIRA, SalesForce, and Siebel.

Lead Research Assistant   March 2019 - December 2019
CSUF Intelligent Learning Experience Lab — Fullerton, CA

- Applied the Microservices Architecture to the core grading system to breakdown the monolithic application to organize while streamlining application scalability to match increasing team growth.
- Addressed the issue of inter-microservice communication by implementing gRPC and Protocol Buffers (Protobuf) for consistent contracts and flexibility.
- Ported the Learning Tools Interoperability (LTI) Library from PHP to the Go Programming Language.

PROJECTS

Speller *(Go) — https://github.com/MatthieuTran/cs50-go/tree/master/speller*

- Produced a real-world implementation of the hash table data structure, checking an input's spelling with a file-based database provided by Harvard's online CS-50 course.

Myer's Diff Implementation *(C) — https://github.com/MatthieuTran/myers-diff*

- Recreated the diff command on Linux systems that displays the line-by-line differences between two files.
- Applied the Myers diff algorithm by abstracting each line of text as a node in a graph to eventually find the shortest edit path for difference calculation.

mungjar's Portfolio *(PHP, Python) — https://mungjar.art*

- Collaborated with artist "mungjar" to design and publish a "artist-first," creative portfolio website by creating a central system for managing commissions and adding artwork to display in a gallery.
- Leveraged the Discord API to enable single-sign-on (SSO) by working with the OAuth2 system, providing the artist and his clients a private channel for support.
- Optimized website loading speeds by 10% by caching content on a Redis database.

EDUCATION

Computer Science, B.S.   Sept 2017 - Dec 2021
California State University, Fullerton   GPA: 3.42

TECHNICAL SKILLS

Languages: Python, C, C++, Go, JavaScript (ES6), SQL, HTML, CSS

Technologies: Node.JS, React, GraphQL, MongoDB, Redis