


KERELOS TAWFIK

SOFTWARE ENGINEER



 0405390557

 kerelostawfik12@gmail.com

 48 Taren Road, Caringbah South
2229

 github.com/kerelostawfik12

PROFILE

I am a software engineering student studying at UNSW with 6 months of experience in full-stack web and application development. Team player with a strong work ethic and creative mind.

SKILLS

- Angular Framework
- Functional Programming
- Object-Oriented Design
- Front End Coding
- Back End Coding
- Full-Stack Development
- C/C#/C++
- Strong Communication

EXPERIENCE

JUNIOR SOFTWARE DEVELOPER

MAIA Financial/Credabl

2020 - Present

- Website and API design.
- Independently created form recognition tool using newly developed software
- Unit Tests and Integration Tests

EDUCATION

SECONDARY SCHOOL

Redeemer Baptist School
2007 - 2017

BACHELOR OF TECHNOLOGY

University of Technology Sydney
2018 - 2021

PROJECTS

INVOICES API

- Developed full-stack web application that utilised Microsoft Form Recognizer when it was relatively new. This would read in invoice forms and extract the form data. The backend was written using C#/ASP.NET and the frontend was written using Angular.

WORK EXPERIENCE

MAIA FINANCIAL/CREDABL

- **Accounting API Integrations:** Developed code for retrieving balance sheets and profit & loss data from QuickBooks, MYOB and Xero accounting APIs to streamline and simplify the loan application process.
- **Document Parser:** Created a service that ran code inside Word documents to replace the code template with the output. This was a document generation tool that was planned to be used for the generation of custom financial documents.
- **Email notification:** Created a service that would automatically send an email through the use of SendGrid API to notify the applicant and their nominated accountant at the end of the loan application.
- **CI/CD:** Created an Azure pipeline to automatically update the staging server upon pull request approval. Upon passing tests and approval from my supervisor, changes would be pushed to a separate production server.
- **Data Collection:** Developed methods to extract and store form application data within a MYSQL database.
- **Front End Code Redesign:** Redesigned the code base for the front end to be more concise and extendable.
- **Front End Design:** Developed a responsive front end using Angular and Bootstrap. Many services written here were planned to be used in other projects throughout the company reducing workload for future projects.
- **Linking Front and Backend:** Built services in the front end to handle API calls to the backend.
- **Web Services:** Created many RESTful API endpoints using ASP.net for tasks such as data processing.
- **Teamwork:** Worked in an Agile work environment with stand-ups, sprint planning and issue tracking using Jira in order to enable clear communication between the team and myself.
- **Unit Testing:** Utilised NUnit to create a set of unit tests for all backend services, ensuring functional correctness of the code I had developed.

PRIVATE TUTORING

- **Computer Science:** Taught the basics of programming, object-oriented design, networks, databases, and AI to multiple CSE students.
- **4-Unit Mathematics:** Taught HSC topics of 4 unit mathematics and physics to grade 12 students.

PROJECTS

Graph & Algorithms

- Dynamically programmed Graphing Algorithms (cycle checking, Vertex Reachability Dijkstra's Algorithm, Tarjan's Algorithm, Strong Connectivity, Weak connectivity, Hamiltonian path checking etc.)
- [Github Repository](#)

NotAmazon

- Led a team of 6 other students to develop full-stack web application. This application has three separate views for sellers, administrators and customers with different privileges assigned. The frontend was written utilising a reactive design in Angular. The backend was written in C#/ASP.NET and the database utilised was Microsoft SQL.
- [Github Repository](#)

Jamie's Computer Store

- Created a Graphical User Interface utilising MVC & Observer patterns. This was written in JavaFX
- [Github Repository](#)