Tuna Uygun

Education

Carleton University Graduation: May 2025

Bachelor of Engineering — Software Engineering

Ottawa, ON

- Graduated with High Distinction
- Courses: Web Development, Network and Software Security, Computer Communications, Software Validation, Software Architecture & Design, Database Management Systems, Operating Systems, Intro to Real-Time Concurrent Systems, Computer Organization and Architecture, Algorithms and Data Structures, Object-Oriented Software Development

Work Experience

Environment and Climate Change Canada

Sep-Dec 2023 & May-Aug 2024

Web Developer Co-op

Gatineau, QC

- Developed and implemented a C# bulk-generation API endpoint to generate dozens of PDF reports in one call, reducing manual effort by 80%
- \bullet Upgraded the code base to .NET with dependency injection and asynchronous processing, speeding bulk report generation time by 50%
- Authored T-SQL stored procedures and scripts to archive multi-table reports with full referential integrity
- Analyzed execution plans, restructured operations, and added indexes in MS SQL Server to decrease the query response times and eliminate timeouts

Department of Justice Canada

Apr 2023 - Aug 2023

IT Developer Co-op

Ottawa, ON

- Implemented new features and bug fixes for a legal case management system using Microsoft Dynamics 360
- Performed system testing on developed features and bug fixes and documented their status on Azure DevOps
- Collaborated in an **Agile** team, actively participating in daily stand-ups, sprint planning, reviews, and retrospectives, while managing tasks and progress using **Azure DevOps**.

Transport Canada

May-Sep 2022 & Jan-Mar 2023

Junior Programmer Analyst Co-op

Ottawa, ON

- Developed **Python** scripts using **Shapely** and **Folium** to generate and visualize 3D Obstacle Limitation Surfaces (OLS) around **320**+ airports, aiding aviation inspectors in hazard assessments
- Implemented ETL (Extract, Transform, and Load) pipelines on geospatial data for aerodromes using GeoPandas in a Databrick Python notebook, streamlining data ingestion and transformation workflows
- Developed a web application using **React.js**, **ArcGIS Experience Builder**, and **ArcGIS API for JavaScript** to search, monitor, and track vessel traffic using vessel AIS data

Projects

Yet Another Travel Map - YATM | Website | Source Code

 ${\bf ReactJS} \mid {\bf Spring \ Boot} \mid {\bf PostgreSQL}$

- Developed and deployed a full-stack web application that enables users to document travel plans on an interactive map
- Utilized PostgreSQL for data storage, Spring Boot for a RESTful API backend, and ReactJS for the user interface

Course Planner - Coplaner | Website | Source Code

SQLite | JavaScript | Express.js

• Developed a web application using **JavaScript** and **Express.js** to generate conflict free timetables for **20000+** Carleton University undergraduate students, saving them time during course registration

 $\textbf{Student Exam Grade - Teagrade} \mid \textit{Website} \mid \textit{Source Code}$

SQLite | JavaScript | Express.js

• Developed a full-stack marketplace application for automatically grading student exams, utilizing **Bootstrap** for the frontend, **OpenCV** for computer vision processing, **MongoDB** for the database, and a **Express.js** backend

Shared Checklists - Avely | Source Code

Android | Kotlin | Firebase

 Designed and implemented an Android application using Kotlin and Firebase with knowledge of user authentication, and real-time cloud databases that allow users to collaborate on a checklist

Technical Skills

Languages: Python, Java, C#, SQL, HTML5, CSS, JavaScript, C, Kotlin, TypeScript

Developer Tools: Git, Azure DevOps, GitHub, Postman

Libraries/Frameworks: Spring Boot, ReactJS, PostgreSQL, MongoDB, Node.js, Express.js, Leaflet, Tailwind CSS