

OMAR BARANEK

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SKILLS

Languages: C++, C, JavaScript, Python, SQL, Bash
Technologies: NodeJS, ExpressJS, React, PostgreSQL, MySQL, MongoDB, Git, GDB, Linux

WORK EXPERIENCE

Avidbots

Perception Software Engineer

Kitchener, ON

May 2020 - September 2020

- Automated unit tests by developing a C++ ROS node with OpenCV and PCL
- Performed a comprehensive analysis of depth sensors to develop a benchmark for performance
- Designed, developed and hosted on AWS an SQL database storing the results of thousands of atomic tests for depth sensors
- Reduced the time taken for sensors' evaluation by over 3 folds

PROJECTS

Constructor C++

<https://github.com/obaranek/constructor>

- Developed a board game utilizing **OOP principles** such as abstract classes and virtual functions
- Used various design patterns such as **Model-view-controller**, Iterator and Factory

Venue Tracker NodeJS, ExpressJS, MongoDB

https://github.com/obaranek/venue_tracker

- Created a **RESTful API** using **EspressJS** and **NodeJS**, integrated with **MongoDB**
- Implemented user authentication using **JSON Web Tokens** and **BcryptJS**
- Used the **Google Maps API** to convert addresses to coordinates and recommend nearby venues

Subleteer React

<https://github.com/obaranek/subleteer>

- Developed UI by **React** and sent HTTP calls using **Axios** to save and retrieve application state
- Managed authorization of users and application state using **React Hooks** and **Redux**
- Implemented UI elements using **Bootstrap** and handled user data leveraging **React Forms**

UWScheduler Python, Flask

<https://github.com/obaranek/UWScheduler>

- Parsed **JSON** responses and implemented the Requests library to **scrape** website data
- Cached professor names and ratings, reducing app load time by **5 times**

AWARDS

Euclid School Champion

Placed top of the school for the Euclid Mathematics Contest, and top 25% globally

University of Waterloo

Jan 2019

Highest Honours

Graduated with 95% Average

Maadi Narmer School

June 2019

EDUCATION

University of Waterloo

Candidate for BCS Computer Science

Waterloo, CA

Sep 2019 - Apr 2024

- President's Scholarship of distinction
- Winter 2020: Term Dean's Honours List
- Spring 2020: Term Distinction

INTERESTS

Interests: Soccer, Table Tennis, Swimming, Hip-Hop, Linux