Omar Baranek

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SKILLS

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

WORK EXPERIENCE

Avidbots   Kitchener, ON
Perception Software Engineer   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
- Adhered to authentication and authorization standards 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 the application state
- Managed authorization of users and application state using React Hooks and Redux
- Implemented UI elements using Boostrap and handled user data leveraging React Forms

UWSchedular *Python, Flask*   https://github.com/obaranek/UWScheduler

- Parsed JSON responses and implemented the Requests library to scrape website data
- Created REST APIs (backend) using Flask (Python micro framework)

AWARDS

Euclid School Champion   University of Waterloo
Placed top of the school for the Euclid Mathematics Contest, and top 25% globally   Jan 2019

Highest Honours   Maadi Narmer School
Graduated with 95% Average   June 2019

EDUCATION

University of Waterloo   Waterloo, CA
Candidate for BCS Computer Science *GPA: 3.9*   Sep 2019 - Apr 2024

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

INTERESTS

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