

OMAR BARANEK

Waterloo, CA · obarane@uwaterloo.ca · (416) 452-0236 · omarbaranek.com

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/obarane/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/obarane/venue_tracker

- Created a RESTful API using ExpressJS 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/obarane/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 Bootstrap and handled user data leveraging React Forms

UWScheduler Python, Flask <https://github.com/obarane/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
BCS Computer Science GPA: 3.9 Sep 2019 - Apr 2024

- Winter 2020: Term Dean's Honours List
- Spring 2020: Term Distinction

INTERESTS

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