

Robert Andrew Conrad

robertconrad.me

Email : robert.conrad@ieee.org
GitHub/Linkedin @PirateRoberts98

EXPERIENCE

- **Face 4 Systems** Ottawa, ON
Software Engineer *July 2021 - Present*
 - **Mobile:** Developed multiple cross platform mobile apps in Flutter/React/C++/C# to perform Face Recognition and Access Control Use Cases. Process includes UX and Architecture Design, Testing and Continuous Integration(CI)
 - **Backend:** Designed REST API Clients in C#.Net, Flutter and Javascript to perform image analysis, system controls and large scale data migration
 - **DevOps:** Created workflows to support deployment of the application in AWS for customer use using containerization and scripts created in Bash, Powershell and Golang
- **Quantropi** Ottawa, ON
Engineering Intern *May 2020 - Dec 2020*
 - **DevOps:** Developed a quality assurance and CI process for dynamic C++ and Python SDK delivery using CMake and Bash
 - **QA:** Created an automation script that randomized inputs that could integrating into existing CMake and xUnit frameworks
- **Ciena** Ottawa, ON
Software Developer, Coop *Sept 2019 - Dec 2019*
 - **Distributed Apps:** Developed a cross system micro service in Go for logging, data export and API configuration
 - **Database Debugging:** Fixed variety of bugs in NoSQL database Swagger API and supporting Swagger API
- **Pleora Technology** Ottawa, ON
Embedded Software Developer *Jan 2019 - April 2019*
 - **Imaging Firmware Bootloader:** Expanded functionality of existing tool to recognize new camera specifications
 - **License Manager:** Created a licensing tool to perform offline creation, validation and distribution in C#
- **Nordiasoft** Gatineau, QC
Mobile Application Developer *May 2018 - August 2018*
 - **Android:** Created a Android app in Java that turned a phone into a radio input and controller using a SDR

PROGRAMMING SKILLS

- **Programming Language** Python, Golang, Flutter/Dart,C/C++, C# , JavaScript/React
- **Frameworks & Tools** .NET (C# MAUI, ASP.NET .NET 4.8), SQL (SQLite, PostgreSQL, Microsoft)
- **DevOps** VCS (Git,Mercurial,CVS), CI (Jenkins, Bamboo,TeamCity), Docker,VM (Virtualbox), AWS, CMake

EDUCATION

- **University of Ottawa** Ottawa, ON
Bachelor of Applied Science, Computer Engineering (Management & Coop Options) Cum laude *2016-2021*
 - **Topics:** Programming, Algorithms, Systems Design, Database, AI, Networking etc
 - **Extra Curricular:** IEEE Student branch Treasurer/Chair, uOttHack Founding Team 2017/19,Ottabotics Software Team Lead, ESSCO Board Chair, Endowment Fund Committee Member 2018-22

PROFESSIONAL INVOLVEMENT

- **IEEE:** IEEE STEM Champion 2024/25, IEEE Ottawa STEM Chair, IEEE ORC Chair, Former Student Branch Treasurer and Chair/President

PROJECTS

- **uOttawa Roboboat**

University of Ottawa

Software Co-lead

September 2017 - December 2018

- **Architecture:** Designed systems architecture for multi competition autonomous surface vehicle in ROS, Python and C++. Primary focus on control integration and core behaviour systems
- **Algorithms:** Worked alongside masters student to determine algorithms to solve each navigation challenge, including RA* and decision tree

- **Capstone Research: Retirement Hygiene Management**

University of Ottawa

Team Lead

January-December 2020

- **Design and Proposal:** Developed a prototype system for local medical technology engineer to monitor water use of an individual in a private and none invasive way to allow longer self autonomy per the Emerging Technologies Report of 2019
- **Hardware:** Created Hardware side REST API Call to transit Data over REST API via Python and Go with a option Camera Module
- **Architecture:** Designed systems architecture including hardware design and network architecture for local hardware to communicate with Healthcare Agent Data Portal