Robert Andrew Conrad

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EDUCATION

- **University of Ottawa**   Ottawa,ON
  Bachelor of Applied Science,Computer Engineering (Management & Coop Options) Cum laude   *2016-2021*
    - **Topics**: Programming, Algorithms, Digital Designs/Architecture, Database, AI, RTOS, Networking etc

EXPERIENCE

- **Face 4 Systems**   Ottawa,ON
  Software Engineer   *July 2021 - Present*
    - **Mobile**: Develop Cross Platform Mobile Apps in Flutter/React/C++/C# to perform Face Recognition and Access Control Use Cases for various deployment cases. Process includes UX and Architecture Design, Testing and CI
    - **Backend**: Develop Backend REST API Clients in .NET MAUI, ASP.NET, Forms and Flutter in C#, Flutter and Javascript to perform image analysis and system controls

- **Quantropi**   Ottawa,ON
  Engineering Intern   *May 2020 - Dec 2020*
    - **DevOps**: Developed a QA & CI process for dynamic C++ & Python SDK delivery using CMake and Bash
    - **QA**: Researched testing automation for randomization and integration using CMake and xUnit frameworks

- **Ciena**   Ottawa,ON
  Software Developer, Coop   *Sept 2019 - Dec 2019*
    - **Distributed Network Management**: Develop logging mechanism in Go for micro service network management tool, including logging consolidation,export and API configuration
    - **Database Debugging**: Debug NoSQL database API in Django and Swagger to correct parameter ignored on database requests

- **Pleora Technology**   Ottawa,ON
  Embedded Software Developer   *Jan 2019 - April 2019*
    - **Imaging Firmware Bootloader**: Created in C++, expanded functionality to recognize new camera specifications with board boot loader and allow custom GenICam firmware payloads
    - **License Manager**: Created a offline licence manager tool for offline licensing in C#

- **Nordiasoft**   Gatineau,QC
  Mobile Application Developer   *May 2018 - August 2018*
    - **Android**: Created Android application from scratch in Java and Kotlin to mimic radio controlled hardware utilizing a software defined radio for communication and general phone hardware for all other functionality

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

- **Retirement Hygiene Management**   University of Ottawa
  Team Member   *January-December 2020*
    - **Design and Prposal**: 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

Professional Involvement

- **IEEE**: Former Student Branch Treasurer and Chair/President, Ottawa Section Student Representative, IEEE Young Professionals Volunteer 2023, Ottawa Robotics Competition High School Robotics Chair 2023-24
- **University Extra Curricular**: Ottabotics Robotics Team Community & Business Manager uOttaHack MLH Hackathon Founding Logistics Team 2018/19, Ontario Engineering Societies (ESSCO) Board Chair, EEF Member 2018-22

Programming Skills

- **Programming Language** Python, Golang, Flutter/Dart,C/C++, .NET (C# MAUI, ASP.NET .NET 4.8), Limited experience in Javascript

- **DevOps** VCS (Git,Mercurial,CVS), CI (Jenkins, Bamboo,TeamCity), Docker, CMake