

# **Andrew Struthers**

Computational Science graduate student with Applied Mathematics and Electrical Engineering degree with patent pending software, Low Earth Orbit imaging satellite, and many other projects.

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AStruthers2000

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in Andrew Struthers

## **Professional Skills**

Embedded Systems Engineering

Electrical Engineering

Software/Hardware Integration

Software Development

Object Oriented Programming

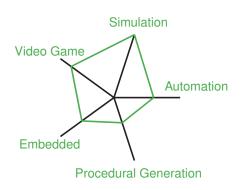
Debugging

Mathematical Modeling

## Technical Skills -

- Atmel, MicroChip, PIC24/32, CAN, UART
- </> Python, C, Assembly, C#, Java
- Visual Studio, MPLabX, LabVIEW, Spyder
- Microsoft Suite, LaTeX, Mathematica, MATLAB
- Unreal, Unity, WPF, PyGame
- Calculus, Differential Equations,
  Discrete Mathematics,
  Numerical Analysis

### **Development Focus**



# Work Experiences

## **Multi-Agent Modeling Research Assistant**

2022-Present

Working with AnyLogic Simulation and Dr. Carlo Smith to make hands-on digital twin simulations of various supply chain management concepts to be used in Central Washington University's undergraduate business programs.

## **Technology Specialist Assistant**

2019-2021

Created patent pending software that bridges a gap in the construction industry. The software allows the younger generations to be more excited about working in an often overlooked, but necessary, field.

# UI/UX Web Developer and Office Automation Programmer 2018-2020

- Central Washington University

Worked on optimizing, improving user experience, and redesigning the Career Services webpage within the CWU.edu domain. Additionally, I wrote code to assist in automating many repetitive tasks in the Career Services office, including pulling and formatting reports from online databases as well as scripts that performed data analysis required to make decisions on vital on-campus services.

## (Education)

#### **Computational Science Masters**

2022-Present

Currently working on a Computational Science masters degree with a focus in Digital Signal Processing and Machine Learning optimization.

#### Applied Mathematics

2018-2022

Earned a degree in Applied Mathematics with a focus on Mathematical Modeling. Worked in a small collaborative team to develop a system of mathematically based tools to analyze and predict stock market behaviours.

#### **Electrical Engineering**

2018-2022

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Earned a degree in Electrical Engineering, focusing on embedded systems engineering. Completed an individual research project centered around data acquisition, communication, and analysis with embedded technology.

# **Activities**

- Video Game Creation
- Competitive Simulator Racing
- Tabletop Roll Playing Games
- Boating