

Jimmie Cox

Personal Website | LinkedIn | Github
2120 3E Zink Rd, Fairborn, Ohio | 337.347.1139 | cox.366@wright.edu

EDUCATION

WRIGHT STATE UNIVERSITY
BS IN COMPUTER SCIENCE
December 2025 | Dayton, OH
Cum. GPA: 3.42 / 4.0

SKILLS

LANGUAGES

Python • GDScript •
HTML • CSS • Javascript
• Java • C/C++ • \LaTeX

HARDWARE

ESP32 DW1000 UWB Module •
Raspberry Pis

VERSION CONTROL

Git • Github Desktop

COURSEWORK

UNDERGRADUATE

Human-Computer Interaction
Computer Graphics
Intro Machine Learning
Applied Machine Learning
Introduction to Cybersecurity
Intro To Software Engineering
Senior Design I-II
Linear Algebra
Statistics For Engineers

CERTIFICATIONS

COURSERA

Machine Learning With Python IBM
Credential ID: Q7J77RX7HC27
IBM COBOL Basics
Credential ID: 6639WCM0P5NR

RED CROSS

First Aid / CPR
Certificate ID: 01M5V7L

AWARDS

COURSERA

2023 - 2nd Place / 100 USD ACM
Programming Competition
2022 - 1st Place / 50 USD ACM
Programming Competition
2022 - 1st Place / 1,500 USD Climate
Change Initiative Design Competition

EXPERIENCE

TERASCALE ALL-SENSING RESEARCH STUDIO | RESEARCHER

August 2025 – Current | Dayton, OH

- Developing immersive VR-based platforms to understand human preferences when interacting with collaborative robot.
- Working on a gesture controlled virtual UR10 robot designed in Unity.
- Integrating Delsys sEMG sensors and vision data from an Orrbec Femto Bolt RGB-D camera to understand user gestures to control the robot.

WSU CATS IT HELP DESK | SENIOR IT HELP DESK EMPLOYEE

January 2023 – Current | Dayton, OH

- Answered student, faculty, and staff emails, phone calls, and in person questions regarding IT services and software Wright State offers.
- Used Beyond Trust Remote Support software to remote into clients' computers to troubleshoot and fix an array of computer related issues.
- Handled Xerox printer toner cartridges, waste containers, and other Xerox printer parts for the XC400, XC600 and XC8000 series printers.

HEROUX DEVTEK | MECHANICAL ENGINEERING INTERN

June 2022 – August 2022 | Springfield, OH

- Designed 3D animated work instructions using 3D VIA for workers on job floor.
- Participated in a weekly progress report presentation to plant higher ups on the 3D VIA work instructions project.
- Located and documented previously undocumented landing gear parts for the F-35, C-130, B-1B, F-18, F-15, and Boeing 737.
- Helped to write and test an NC program for a CNC machine.

ARTICLES

- [1] J. Cox, "Overfitting vs. underfitting," *Medium*, 2025.
- [2] J. Cox, "Supervised vs. unsupervised vs. reinforcement learning," *Medium*, 2024.
- [3] J. Cox, "A simple explanation of gradient descent: Stochastic, batch, and mini-batch," *Medium*, 2025.

PROJECTS

GCTC GODOT PROJECT | PROGRAMMER AND WEBSITE MAINTAINER

January 2025 – April 2025 | Dayton, OH

- Designed and implemented via HTML, CSS, and Javascript the Generic Campus Tour Company (GCTC) website and deployed via github pages. **GCTC Website**
- Used the Godot 4.3 game engine to create the 3D nodes that display room info.
- Implemented an Alphabet Trie data structure to search through a list of available room locations the user could select.

FLOOR PLAN OCR SCRIPT | DEVELOPER

March 2025 – April 2025 | Dayton, OH

- Used Poppler and Tesseract for .pdf to .png conversion and OCR.
- Implemented the extraction and storage of data in an excel file along with their x and y coordinates to be used in the Godot project.

EARTH TERRAIN IMAGE SEGMENTATION | RESEARCHER

August 2024 – December 2024 | Dayton, OH

- Wrote the Python code that pulls from a dataset of terrain images (Kaggle) to build a mask and create terrain segmentation images using an SVM.
- Worked in a team environment to create a term report and presentation.