github.com/MayCXC apaterson@pm.me 1 860 515 0499



WORK EXPERIENCE

HTML, CSS, JS, Docker, Kubernetes, Git, Jira, Confluence

- **Zonos**.....<u>zonos.com</u> Software Engineer
 - Informing online shoppers on duty & tax costs with international shipment APIs
 - Upgrading REST endpoints with GraphQL and Spring Boot via DGS
 - Collaborating with Agile Methodologies and VCS using Scrum and Git

Since 2022 · Java, DGS, Spring Boot, GraphQL, Gradle, PostgreSQL, AWS

- Picnic Score picnicscore.com Full-Stack Developer
 - Created API services that automated content detection and deletion from multiple online sources
 - Leveraged the Google Cloud Platform and demonstrated its applications to live audiences
 - Maintained code through extensive refactors, using version control, CI/CD, and unit tests to streamline tedious processes

Summer 2021 · Python, Go, Node.js, Puppeteer, MongoDB, Terraform, GCP

- Flamig Farmflamigfarm.com Web Developer
 - Designed and published a "Sponsor an Animal" page for an existing WordPress website in response to loss of business during Covid-19
 - Automated the creation of separate mailing lists, a personalized thank you message, and gift links
 - Provided weekly in-person training Summer 2020 · PHP, WooCommerce, AutoHotkey
- Complexity Rooms git.io/fjnht Electronic Technician
 - Designed, fabricated, programmed, installed, and documented four Arduino-based escape room puzzles
 - Estimated and adjusted budgets and deadlines
 - Implemented hardware including protoboards, digital LED strips, RFID, Hall Effect, and Piezo sensors Summer 2019 · C++, Arduino.h, FastLED

STUDENT EXPERIENCE

- **IoT Independent Study....**.git.io/Jtxbz
 - Designed and programmed a Bluetooth Low Energy presence detection meshnet on the ESP32 platform
 - Collaborated with other independent study members to separately design compatible 3D printed hardware and a database REST API

Winter 2021 · esp-mdf, Plug.Cowboy, Eclipse Paho

- FIRST Robotics.....git.io/JLkYr
 - Lead a programming team of Simsbury High School students using a command-based API to learn and implement best practices
 - Coordinated with mentors and several specialized teams to set and meet budgets and deadlines Winter 2018 · Java 8, WPILib, GRIP

RESEARCH EXPERIENCE

Python, NumPy, pandas, Colab, Matplotlib

- **Tennessee Tech NSF REU...**.git.io/JzmZB
 - Assisted graduate and PhD researchers in applying machine learning models to electricity theft detection
 - Presented progress and results on a weekly basis Summer 2021 · Keras, Adversarial Robustness Toolbox
- **DIPC Physics Project** git.io/JEbDV
 - Queried an atomic simulation database of 2D materials to identify broken gap heterojunctions in crystal bilayers by applying density functional theory
 - Created interactive visualizations to aid in the design and analysis of Van der Waals heterostructures Winter 2021 · Computational 2D Materials Database, Atomic Simulation Environment, Quantum ESSPRESSO

COMPETITION EXPERIENCE

- **Dyalog APL Competition....** git.io/JzmZ3
 - Placed third in phase II Winter 2021 · Dyalog APL
- **IBM Master the Mainframe...**git.io/JOHCB
 - North American Regional Winner Winter 2021 · JCL, Enterprise COBOL, REXX, TSO, Docker, Ansible
- College Tech Challenge git.io/fpZTb
 - Placed first with Quinnipiac and UConn students Winter 2019 · GitHub, VSCode Live Share, Vue.js, DigitalOcean, Heroku