Sebestien Palmerio

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Technical Skills

Languages Bash, C, C++, C#, HTML, CSS, LaTeX, Python
Frameworks/Tools Ansible, ASP.NET Core, Azure, Docker, Git, Jupyter, Linux, MacOS, NumPy
Databases MinIO, NoSQL, SQLite

Work Experience

Palitronica Inc.
Sept 2021 - Apr 2022

Cybersecurity Lab Engineer
Waterloo, ON

- Developed .NET Web APIs to view inventories with Azure Tables, manage IoT Devices and IoT Edge Devices, and update Device Twins and Module Twins, completely automating deployment and removing dependency with the Azure Portal.
- Wrote scripts in Ansible, Bash, and Python to automate tasks including an Ansible playbook to automate the provisioning of IoT Edge devices, reducing deployment time by up to 90%.
- Designed and implemented production-ready logging structures for .NET microservices using Serilog, sending logs to the ELK stack through Azure Event Hubs, drastically improving logging quality and organization.
- Assisted in the implementation of CD pipelines for .NET and Java microservices being deployed in Azure Container Apps using Drone, creating a strong foundation for future Kubernetes deployment.

Self-Employed
Sept 2021 - Present

Math Tutor

- Freelance math tutor delivering undergrad math course content to students, improving critical thinking and problem solving skills, resulting in students seeing a 20-30% grade improvement on assignments and exams (on average).
- Focused directly on improving students' study habits using concise content delivery of unique, applicable examples.
- Courses taught (with number of students): Algebra (9), Linear Algebra I (2), Linear Algebra II (1), Intro to Optimization (2), Calculus III (1).

University of Waterloo
Sept 2020 - Dec 2020

Online Learning Assistant
Waterloo, ON

- Worked directly with Dr. Joseph Sanderson to improve the online delivery of course content and quality of assessments for the University of Waterloo's Physics 1 (PHYS 111) using Möbius.
- Used Maple to develop and enhance assessment problems, reducing code by up to 15%.

Projects

Capital Ships API
Personal Project

A .NET Web API With CRUD Operations and Advanced SQL Queries

- Implemented a .NET Web API using Swagger, interacting with an SQLite database (with its corresponding ER Diagram).

Pysics
Personal Project

A Computational Physics Python Library

- Includes methods of integration and differentiation, root finding, BVPs, and Monte Carlo simulations.

MyInterviewer
NewHacks 2020 Project

A Web App Based Interview Preparation Platform for Non-Native English Speakers

- Integrated Google Cloud Text-to-Speech and Speech-to-Text APIs in Python and assisted with front-end integration using a GC Storage Bucket.

Education

University of Waterloo
2018 - Present

Candidate for Bachelors of Mathematics in Computational Mathematics

- Majoring in Honours Computational Mathematics - Co-op with a Computing Minor.
- Relevant Coursework: Elementary Algorithm Design and Data Abstraction, Intro to Computer Systems, Algorithmic Problem Solving, Data Types and Structures, Logic and Computation, Object-Oriented Software Development, Databases, Intro to Computational Mathematics.