Sebestien Palmerio

sebestien.com

+1 705-391-8652
sl3palme@uwaterloo.ca
github.com/sebpalmerio
linkedin.com/in/sebestien-palmerio

Technical Skills

Languages | Python, C, C#, Bash, Maple, HTML/CSS

Frameworks/Tools | .NET Core, Azure, Docker, Jupyter Notebook**,** NumPy, Git, MinIO, SQLite, NoSQL, Linux

Work Experience

R&D Engineer September 2021 - April 2022

University of Waterloo - Embedded Software Group

- Constructed an Azure Edge solution and implemented efficient Azure Edge modules, assisted in porting existing Rust code for the Aggregator software to .NET Core 3.0.
- Developed Dockerized programs such as: a standalone simulator to emulate the delivery of Power Trace Packets to an IoT Hub, and a .NET web API to add, remove, update, and query entities within existing Azure Storage Tables (using Azure Tables API and Swagger).
- Wrote scripts to automate tasks such as the process of data transmission from Palisade boxes using Bash, MinIO DB interactions (CRUD) using the MinIO SDK for Python, and a CPU utilization script to iterate through core usage while creating Windows logs on a Windows machine using Python.

Math Tutor September 2021 - Present

Self-Employed (UW Tutor Connect)

- Delivered concepts in a clear and concise manner and demonstrated them with unique examples.
- Total number of students: 14. Courses: MATH 135 (9), MATH 136 (2), CO 250 (2), MATH 207 (1).

Online Learning Assistant September 2020 - December 2020

University of Waterloo

- Worked directly with Dr. Joseph Sanderson to improve the quality of course content and online 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%.

Relevant Projects

Pysics (Personal Project) - github.com/sebpalmerio/pysics

- A Computational Physics Python Library based on the text - Computational Physics by Mark Newman.
- Includes methods of integration and differentiation, root finding, BVPs, and Monte Carlo simulations.

MyInterviewer (NewHacks 2020 Project) - github.com/sebpalmerio/MyInterviewer

- A web application based interview prep platform for non-native English speakers.
- Integrated Google Cloud Text-to-Speech & Speech-to-Text APIs in Python and assisted with front-end integration using a GC Storage bucket.

Relevant Courses

- UWaterloo: Introduction to Computer Science 1 and 2, Introduction to Computers and Computer Systems, Elementary Algorithm Design and Data Abstraction, Data Types and Structures, Algorithmic Problem Solving, Computer Applications in Business: Databases, Computational Physics 2.

Education

Candidate for Bachelor of Mathematics in Computational Mathematics 2018 - Present

University of Waterloo

- Majoring in Honours Computational Mathematics - Co-op with a Computing Minor.

Awards and Activities

- University of Waterloo Merit Scholarship (2018), Ontario Scholar (2018)
- Orientation Team Leader for Banting Memorial High School (2017)