

Michael Rivnak

INFORMATION

CONTACT

+1 203 543-3806
rivnakm1@gmail.com

LINKS

mrivnak.github.io
linkedin.com/in/michael-rivnak
github.com/mrivnak

EDUCATION

WENTWORTH INSTITUTE OF TECHNOLOGY

Bachelor of Science
in Computer Science
Graduated Dec. 2020

COURSEWORK

UNDERGRADUATE

Data Structures
Algorithms
Digital Logic
Databases
Operating Systems
Network Programming
Applied Cryptography
Parallel Computing
Software Engineering
Systems Administration

SKILLS

PROGRAMMING

C/C++
C#
Java
Javascript
Python
Rust

FRAMEWORKS

Django
Electron

TOOLS & TECHNICAL

Visual Studio Code
JetBrains IDE
Linux/Unix
Systems Administration
Embedded Databases

PROFESSIONAL

Agile/Scrum

EXPERIENCE

CONTENT SPECIALIST INTERN | JONES AND BARTLETT LEARNING

May 2019 – Aug 2019 | Burlington, MA

- Assembled applications to automate and optimize workflows
- Maintained documentation of applications for end-user understanding
- Designed Application Programming Interfaces (APIs) to facilitate creation of an extensible application suite

RESEARCHER | WENTWORTH INSTITUTE OF TECHNOLOGY

Jan 2020 – Apr 2020 | Boston, MA

- Collected relevant information on real-time operating systems and integrate information into a university curriculum
- Performed practical analysis of performance and usability benefits and detriments

PROJECTS

ATTENDANCE TRACKER [GROUP] | SOFTWARE ENGINEERING

Sept 2019 – Dec 2019 | Python, Django

- Utilized Django web framework to create cross-platform application
- Integrated templates and views to dynamically render application pages
- Adapted web templates to work with Django and specific applications

UNDERWATER REMOTE OPERATED VEHICLE (ROV) [GROUP]

IEEE WENTWORTH | SOFTWARE TEAM

Sept 2019 – Present | Python, ROS

- Implemented firmware to control ROV motors
- Integrated microcontrollers with high-level Python libraries
- Designed interface to communicate with ROV from control computer

GAME BOY EMULATOR [GROUP] | SENIOR PROJECT

May 2020 – Aug 2020 | C++

- Leveraged existing documentation to create a software emulator for the Nintendo Game Boy CPU
- Implemented register, memory, and state management systems

FORUM [GROUP] | WEB DEVELOPMENT

May 2020 – Aug 2020 | Python, Django

- Utilized Django framework for flexible full-stack development
- Leveraged sqlite database for efficient data storage and organization
- Integrated Bootstrap components for a modern UI

RVPKG-RS | INDEPENDENT

Dec 2020 - Feb 2021 | Rust

- Utilized binary-tree embedded database
- Analyzed product requirements for both ease of development and simplicity of use

PUBLISHED WORK

REAL-TIME OPERATING SYSTEMS: COURSE DEVELOPMENT

Published in: Advances in Parallel & Distributed Processing, and Applications (ISBN 978-3-030-69984-0)

- Investigated real-time operating systems and their applicability to a university operating systems course