Luke Deratzou

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**EDUCATION**

**Worcester Polytechnic Institute (WPI), Worcester, MA**

Bachelor and Masters of Science in Computer Science                   May 2023

GPA 3.8/4.0, Dean’s List

Classes: Software Engineering, Algorithms, Object-Oriented Analysis and Design, OS, AI, Compilers

Leadership Roles: President of MTG Club

Member of Upsilon Pi Epsilon

**SKILLS**

**Programming Languages:** Java, Python, C#, JavaScript, C, C++, PHP, Swift, Lisp, Bash

**Software:** Visual Studio, Unity, XCode, cPanel, IntelliJ, VirtualBox, Excel, R Studio, Eclipse, Vim

**Other:** ExpressJS, Bootstrap, JavaFX, MongoDB, NodeJS, GitHub/git, React, AWS, NextJS, Docker

**WORK EXPERIENCE**

**Software Engineer Intern–** Arista Networks, MA May 2022-August 2022

* Worked on layer 3 technologies, adding production features to switches using C++
* Wrote python tests to validate the features and utilized pdb to debug failures
* Followed a CI/CD pipeline while collaborating on a team and utilizing version control

**Software Engineer Intern**– HCL, Remote             February 2022-May 2022

* Learned Alteryx to solve data science problems and tasks and partook in daily scrum
* Completed a capstone project predicting and analyzing spend trends for car prices using Alteryx

**Software Engineer Intern-** HPR, MA June 2021-August 2021

* Coded in C to develop tests and test infrastructure for company production code
* Worked in Linux environments with terminal commands to run and debug code

**PROJECTS**

**WPL Compiler**, WPI         August 2022-October 2022

* Developed and performed, from scratch, a grammar, lexical and syntactic analysis, a symbol table, semantic analysis, and code generation, using C++ on a simple C-like language
* Utilized tools such as ANTLR and LLVM to develop the program

**Mask Wearing Classification**, WPI                                February 2022-May 2022

* Worked on a team of four to develop a deep learning application for detecting masks
* Utilized TensorFlow and GPU acceleration to calculate the computationally-demanding models
* Utilized several machine learning models and datasets to benchmark performance

**Machine Learning for Spend Procurement**, WPI            October 2021-December 2021

* Contributed to machine learning project for financial institution on spend procurement
* Utilized technologies such as python, sci-kit learn, AWS, snowflake, control-M, and WinSCP
* Worked under agile scrum with daily meetings with team and company employees

**AR/VR Research Project,** WPI January 2021-May 2021

* Developed an AR application for 1-on-1 online therapy and to collect telemetric data
* Utilized tools such as GitLab, Unity, and Visual Studio to research and develop the app