Michael Stephen DeGennaro

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EDUCATION

B.S. COMPUTER SCIENCE/MINOR IN DATA SCIENCE | COLLEGE OF WILLIAM & MARY **AUG. 2019 – MAY 2023**

- 3.89 Major GPA, 3.77 Overall GPA
- Magna Cum Laude
- Dean's List 2021-2023

EXPERIENCE

QUALITY ENGINEERING INTERN | KPMG, MCLEAN, VA **JUNE 2022 – AUG. 2022**

- Developed a testing setup procedure using PowerShell, Postman, and JavaScript
  – Automated Excel data creation using PowerShell script & uploaded data to client's D365 portal with Postman's JS parsing & API requests
  – Decreased data uploading time by 30% and end-to-end (creation and upload) procedure time by 60% compared to the old process
  – Constructed a technical manual for use by the QE team that documents the automation process and troubleshooting steps
- Conducted bug and regression testing for client customer service portal within Azure Dev Ops
  – Gained experience with Microsoft Dynamics 365 including Customer Engagement, Omnichannel, and Finance & Operations
- Worked daily with QE team in an Agile development environment with Scrum meetings and task delegation

IT INTERN | MULLICAN FLOORING, JOHNSON CITY, TN **JUNE 2021 – AUG. 2021**

- Diagrammed the flow of plant operations in LucidChart, a flowchart software, to aid in upgrading the company to an SAP software system
- Created cloud interface with 4 computer systems using Microsoft OneDrive to track wood bundle tags in Excel for production reports
  – Implemented functions in Excel spreadsheets to automate tag input and analysis processes for production and inventory
  – Increased company efficiency by enabling real-time tracking of wood bundles

COMPUTER SCIENCE LAB CONSULTANT | WILLIAM & MARY COLLEGE, WILLIAMSBURG, VA **FEB. 2022 – MAY 2023**

- Aided students for 6 hours weekly in completing projects in C, C++, Java, and Python for Software Development and Algorithms classes

PROJECTS

CODEPROBING | SOFTWARE ENGINEERING CAPSTONE PROJECT, GITHUB **FALL 2022**

- A Python testing library for Neural Code Models in which a pre-trained Python model is tested for various coding capabilities including the ability to fill in identifiers, integers, and comments
- Developed an extensive understanding of Python's Tree-sitter library, GitHub, Jupyter Notebook, and traditional SWE methodologies (Backend Development, System Design and Architecture, UML, Refactoring, Unit Testing, Encapsulation, Loose Coupling, UI, Inheritance)
- Learned how to develop software in an Agile team environment with weekly Scrum meetings, code reviews, and presentations

TCP STATE MACHINE | NETWORK SYSTEMS PROJECT, GITHUB **SPRING 2023**

- A Java program to emulate a TCP (Transmission Control Protocol) network connection between a server and a client, demonstrating a comprehensive understanding of networking protocols and systems
- Employed techniques such as socket programming, multithreading, and error handling to reliably transfer packets of data and tolerate up to 20% packet loss
- Collaborated with another student in a pair programming environment to procedurally implement, execute, and test sections of code

RELEVANT COURSEWORK

- Network Systems and Design
- Finite Automata
- Algorithms
- Data Structures
- Applied Machine Learning
- Software Development
- Comp. Problem Solving
- Intro Data Science
- Computer Organization
- Computer Graphics
- Software Engineering
- Data Visualization
- Calculus 2
- Linear Algebra
- Principles of Programming Lang.
- Discrete Structures of CSCI
- Computer Architecture

SKILLS

- ***Developmental Tools:*** Git/Github/GitLab, Android Studio, Jupyter Notebook, Linux (Ubuntu), Postman, Tableau, Docker, Spring Webflux, Jenkins, REST API, MongoDB, React.js, and various IDEs (VSCode, Atom, Eclipse, IntelliJ IDEA)
- ***Developmental Methodologies:*** Agile, Object-Oriented Programming, Data Structures, Unit Testing (JUnit), DevOps, UI/UX Design, NoSQL, CI/CD, Machine Learning, Pair Programming, Multithreading, Error Handling, Recursion, Algorithms, Data Processing, Compilation/Execution
- ***Business Software:*** Azure DevOps, D365 Customer Engagement, Omnichannel, Finance & Operations, Excel, OneDrive, LucidChart
- ***Coding Languages:*** Proficient in Python, Java, C++, and Unified Modeling Language (UML); Prior experience with C, XML, Y86 Assembly, Javascript, PowerShell Scripting, HTML, CSS, and Haskell
- ***Memberships and Accolades:*** Licensed Student Pilot, Intramural Chair for Sigma Alpha Epsilon Fraternity