#### JOSEPH CALL

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## **EDUCATION**

William & Mary, Williamsburg, Virginia

Bachelor of Science, Expected May 2022 Major: Computer Science

Honors: Alpha Lambda Delta, Phi Eta Sigma

Cumulative GPA: 3.59/4.0

#### **RELEVANT COURSES**

Applied Cybersecurity

- Performed vulnerability assessments and penetration tests on lab servers
- Wrote reports for penetration tests
- Mitigated security vulnerabilities

# Software Development

- Expanded upon 3D first-person maze game
- Developed front-end and back-end code in Java and XML through Android Studio
- Worked with GitLab, Eclipse, and SCRUM practices

# Database Systems

- Used PostgreSQL and Python to develop an inventory management system for William & Mary
- Analyzed performance of SQL queries
- Practiced effective database design (ER diagrams) with the use of a vector graphics program, Inkscape

# **COMPUTER SKILLS**

Programming: Python, Java, C#, C++ Databases: PostgreSQL, Psycopg2

Android Development: Android Studio, Firebase, XML Operating Systems: Windows, Unix, Linux, Android

Other: Eclipse, Visual Studio 2019, Vim, SFML, Inkscape, active participant in GitHub

# RELEVANT EXPERIENCE

Coding instructor, Codakid, Remote, May 2021 - present

- Tutored children ages 6-15 in Python and Scratch
- Worked with a team of tutors and staff to teach basic programming concepts and applications
- Promoted development of critical thinking

## **PROJECTS**

William & Mary Inventory Management System (GitHub)

- Command-line application that uses a PostgreSQL database to keep track of all computer systems and components used by the College of William & Mary. Project is currently in use by William and Mary's computer science and math department
- Developed in Python

Course Schedule Generator (github.com/jbcallv/wm-schedule-generator)

- Web application that generates a conflict-free course schedule for students at William & Mary
- Personal project in progress using Javascript, HTML, and CSS

Maze (github.com/jbcallv/maze)

- Desktop application for generating pseudo-random mazes using backtracking algorithm
- Developed in C++ using the SFML graphics library

## **LANGUAGES**

English: 5/5/5 Spanish: 5/5/5