James Boyden Tanner

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Education

University of Virginia, School of Engineering and Applied Science (3.81 GPA), Charlottesville, VA
    B.S. in Computer Science, anticipated B.A. in Economics, Dean's list   Anticipated May 2025

The William Penn Charter School, Philadelphia, PA
    High School Diploma, 8 Semesters Academic High Honors, Cum Laude Society   June 2021

Relevant Internship Experience

Software Engineering Intern, The Brandtech Group, Philadelphia PA   May - August, 2022
- Implemented facial recognition software utilizing AI to enhance the Brandtech Visual Intelligence platform
- Collaborated in person and online with international team of developers utilizing Agile methodology
- Developed in Python and SQL using Alembic, SQLAlchemy, PostgreSQL, and the Google Cloud Platform

Technical Projects and Course Work

Fantasy football draft optimization algorithm, Python   2020, 2022
- Developed an elastic-net regression algorithm to rank players in a fantasy football draft

Independent Coding Projects: Numer.ai machine learning predictive model, Python   2022
- Created a machine learning model from obfuscated stock market data
- Competed in the Numer.ai data science tournament

Monte carlo method optimized stock portfolio algorithm, Python   2021
- Coded an algorithm to visualize and determine an optimal stock portfolio
- Implemented modern portfolio theory to optimize returns vs volatility

Class Coding Projects: Fall detection cane with notification system, Python   2021
- Constructed a cane with embedded accelerometers and force sensors
- Collaborated with a team to program the fall detection and notification system

Tic-tac-toe game, JavaScript   2019
- Programmed an interactive tic-tac-toe game

Relevant Courses: CS 3100 - Data Structures and Algorithms
- Learned advanced data structures, program analysis, and object oriented programming in Java and Python
- Completed weekly programming assignments to practice technical skills

CS 3140 - Software Development Essentials
- Learned to collaboratively design, test, and develop large scale, full stack applications
- Built in Java using Gradle, Git, JUnit 5, Mockito, SQL JDBC, and Hibernate

CS 2130 - Computer Systems and Organization
- Learned computer architecture and hardware design at various levels of abstraction
- Worked in low level programming languages such as C and Assembly

Technical and Professional Skills and Certifications

Proficient in Python, Java, and C; Knowledgeable in JavaScript, SQL, and GIT; Extensive experience with spreadsheets in Excel or Google Sheets; Familiar with Matlab and Simulink; Strong communication and leadership skills

Other Work Experience

Head Lifeguard, North Hills Country Club, Oreland, PA   Summer 2021
Lifeguard, North Hills Country Club, Oreland, PA   Summers 2019 - 2020
- Promoted to Head Lifeguard after serving as Lifeguard for two years
- Managed other lifeguards, supervised and ensured the safety of swimmers, maintained facility cleanliness, and opened and closed the pool during the summer.

Counselor in Leadership Training, YMCA Camp Sea Gull, Arapahoe, NC   Summer 2019
- Repaired and maintained power boats of various engine types and taught boating skills
- Engaged in weekly leadership training sessions to develop communication, conflict management, organization, and team building skills

Leadership, Honors, Awards, and Publications

Eagle Scout, Boy Scouts of America	2021
Captain, Varsity Crew	2021
Clerk (President), Model United Nations Club	2020 - 2021
Clerk (President), Political Awareness Club	2019 - 2021
Science Center Peer Tutor	2019 - 2021
Good Citizenship Award, Union League of Philadelphia	2020
Published Mathematical Proof in NY State Mathematics Teachers' Journal	2020
Letter of Commendation, National Merit Scholarship Program	2020