

James Boyden Tanner

604 Creek Lane Flourtown, PA 19031

215.620.1241 | pey3cj@virginia.edu | www.linkedin.com/in/james-tanner

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 2100 - Data Structures and Algorithms

- Learned foundational data structures, program analysis, and object oriented programming in Java
- Completed weekly programming assignments to practice technical skills

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

ENGR 1624 - Introduction to Engineering

- Gained exposure to engineering principals through a semester-long project

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, supervising and ensuring the safety of swimmers, maintaining facility cleanliness, and opening and closing the pool during the summer.

Counselor in Leadership Training, YMCA Camp Sea Gull, Arapahoe, NC

Summer 2019

- Provided leadership and guidance to ten eight-year-olds, and shared a cabin
- 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