# Grant Freeman Bowlds

Grant.F.Bowlds@Vanderbilt.edu

# Academics

#### Vanderbilt University - Bachelor of Science in Computer Science and Mathematics (2018-Present)

- Degree Expected May of 2022
- Cumulative GPA of 3.75/4
- Recipient of a four-year Army ROTC Scholarship

#### **Zionsville Community High School (2015-2018)**

- Graduated in three years with the class of 2018
- ACT: 36; 36 math, 35 English, 36 Science, 36 Reading
- US Presidential Scholar Candidate

#### Languages and Skills

C++ (fluent), Python (pandas, keras, seaborn), Java, R, Maya (beginner), command line (Linux), statistics, linear algebra

#### **Academic Interests**

Cyber-physical systems, big data, deep learning, cyber warfare, and human-centered design

#### **Relevant Coursework**

- Computer Science: Programming Languages, Operating Systems, Intermediate Software Design (C++, git), Data Structures (C++), Cyber-Physical Systems seminar, Discrete Structures, Digital Systems, and Object-Oriented Programming (Java)
- Mathematics: Graph Theory, Statistics for math (R), Differential Equations, Linear Algebra, Multivariable Calculus

# **Experience**

#### Autonomous Driving Research Assistant - Institute for Software Integrated Systems (Summer 2020)

- Recipient of a NSF Grant to research an emerging cyber physical system with support from faculty at Vanderbilt University as well as faculty at the University of Oldenberg in Lower Saxony, Germany
- Currently completing a project on the stratification of Convolutional Neural Networks within autonomous vehicles and will submit a paper upon completion

#### Backend Software Engineering Intern - Notewardy (2020-Present)

- Remote intern for note management and educational technology startup, Notewardy
- Responsible for boosting the performance and accuracy of an AI-driven flash card generator and self-testing software

### Data Analytics Assistant - Vanderbilt Baseball (2019-Present)

- Analyzes data from an AWS database in order to produce graphics and other training aids for both players and coaches using Python with the pandas and seaborn packages
- Collaborates with the coaching staff and a team of around ten other students to accomplish player development goals
- Compares Trackman data across stadiums and umpire data across conferences to assure quality data collection

#### Pool Manager - Highland Golf and Country Club (2015-2019)

- Responsible for leading a team of lifeguards, overseeing day-to-day operation, budgeting, and planning events (2019)
- Coach swim team of 100 swimmers and teach private lessons for children six and under (2017-Present)
- Lifeguard working 30 hours a week during summers and performing general pool maintenance (2016-2018)

# **Campus Involvement**

#### Vice President of Outreach - Lights on the Lawn (2019-Present)

- Lights on the Lawn is a charity concert that raises over \$100,000 annually for domestic violence survivors in Nashville and brings an attendance of over 7.500
- Responsible for collaborating with our non-profit beneficiary, the Mary Parish Center, to make sure their mission is at the forefront of the concert
- Worked with sponsors to secure \$25,000 in corporate donations

# Cadet - Vanderbilt Army ROTC (2018-Present)

- US Army cadet enrolled in Vanderbilt University's "Go Gold" Battalion
- Captain of the Ranger Challenge team, an international competition to test cadets' physical and mental strength
- Will commission as a 2nd Lieutenant in the US Army in May of 2022

#### Internal Vice President - Pi Kappa Alpha International Fraternity (2019-Present)

- Elected internal vice president for 2020 to oversee brotherhood, philanthropy, scholarship, history, and alumni relations for a chapter of 60 men
- Selected as Rush Chair for Fall 2019 and Spring 2020 and as Service chair for Fall 2019
- Member of the Sigma Chapter of ΠΚΑ (Zeta Class)

317.931.9081