

# Grant Freeman Bowlds

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## 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

### Technical Skills

- Fluent in C++, Java, and Python (pandas)
- Experience with R, Matlab, CAD, Version control (git), and graphics (Houdini)

### 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

### Cyber Physical Systems Intern – 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 Germany
- Currently completing a project titled “Model-based development and prototypical realization of a Lane Change System for Highly Automated Driving” and will submit a paper upon completion

### 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 2<sup>nd</sup> Lieutenant in the US Army in May of 2022

### Data Visualization Intern –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 and 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 victims 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

### 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 ΠKA (Zeta Class)

### Executive Board Member – VUcept (2019-2020)

- Vanderbilt’s VUceptors lead first year orientation and **partner** with a faculty member to lead an eleven week “course” with curriculum designed to encourage growth on our campus
- Serves as selections chairman for one of Vanderbilt’s most competitive organizations, including leading interviews and reading written application
- Coordinates with nine other board members to communicate between all 100 members and school administration