

Education

2018-2021 **Bachelor of Science**, *The University of Virginia*, School of Engineering and Applied Science.

Major: Computer Science and Physics

Courses: Algorithms, Artificial Intelligence, Calculus, Circuit Design, Classical Mechanics, Compilers, Computer Architecture, Computer Graphics, Discrete Mathematics, Game Design, Linear Algebra, Ordinary Differential Equations, Program & Data Representation, Software Engineering, Theory of Computation

Skills

Programming C++, Python, Java, Bash, Assembly, Perl
Software Mathematica, MATLAB, \LaTeX

Web Html/Css/Js, React, Web-Assembly
Systems UNIX (Arch), Windows, Arduino

Projects

2020-Present **Andromeda**.

C++ and Web-Assembly A WASM WebGL environment for visualizing anything, from games to algorithms, see robbie-vanderzee.github.io on a modern web browser.

2019-Present **Number Theory**.

Mathematica projects for the study of conventional prime numbers, arithmetic progressions, n-ary pascal sequences, and others. See robbie-vanderzee.github.io for visualizations.

Experience

2020 Summer **Software engineering intern**, *Cvent*, Howard Uman.

React, Apollo, NextJS: Constructed multiple features on a sprint team at Cvent for the Connect 2020 event, namely a 'Contact Us' end-to-end service implementation. Tens of thousands of people used application features I built.

2017-2018 **Junior Biophysics Research Scientist**, *Elon University*, Dr. Benjamin Evans.

MATLAB: Implemented a magnetic micro-sphere simulation to understand the motion of micro-sphere alignments within the body; a related project to non-invasive delivery of medicine.

2016 Summer **Junior Natural Language Processing Research Scientist**, *Virginia Commonwealth University*, Dr. Bridget McInnes.

Perl: Implemented a medical literature based discovery package which takes terms (like symptoms) as input and returns a list of medical conditions sorted by association percentages.

Miscellaneous Achievements

2020 **E-sports**, *Chess*.

Rank: Started 2019, currently ranked 186,817/2.62M (Top 5.12%)

2019 **E-sports**, *League of Legends*.

North America: Ranked 1000/1.7M (Top 0.06%)

2018 **Elon University**, *Physics*.

Award: *Outstanding first year Physics student*

Strengths

Competition I can be competitive where necessary — facilitating rapid, continuous learning. I'm used to defeat and know how to analyze it to improve. I'm a problem solver.

Perseverance I continually work on my endeavors over long stretches of time, and enjoy rather than lament difficulty.

Teamwork I'm a strong team player and communicator. I can explain my work concisely, clearly, and simply.

Languages

English **Native**

Korean **Intermediate**

Con conversationally fluent