https://williamcabell.me *william16180@gmail.com* *+1 (804) 690-6674*

William Cabell

Education

Virginia Tech
Senior mathematics major studying discrete mathematics with a computer science minor. Expected graduation two semesters early in Spring 2020. 3.6 overall GPA. 3.7 in-major GPA.

Relevant Coursework
Graduate-level Algebra, Linear Algebra, Analysis, Number Theory, Data Structures & Algorithms, Topology, Combinatorics & Graph Theory, Computer Organization, Cryptography, Formal Languages & Automata

Skills

Software Development

- Full-stack web development
  Vue.js, TypeScript, Aurelia, CSS, Flask, Nginx, Snowflake, .NET Core, Postgres, Apache, MongoDB
- DevOps/Cloud infrastructure
  Docker, Git, Bash, Jenkins, AWS, Travis, DigitalOcean, GNU Make, Terraform
- Languages
  Python 3, C#, C, Java, JavaScript, SQL, Go, Rust, Matlab
- Other
  Unity3D game development, Swift/Objective-C iOS development

Mathematics

- Algebra
  Group theory, commutative ring theory, abstract linear algebra, category theory, module theory
- Applied mathematics
  Stochastic calculus and financial modeling, probability, game and social choice theory, cryptography

Communication

- Languages
  Intermediate-level French, elementary-level Chinese

Work Experience

Capital One
Data engineering intern, summer 2019. Worked with Snowflake platform team to refactor legacy applications. Improved speed of several applications by up to 180x. Passed internal security certification. Discovered, reported, and developed workaround for serious Snowflake vulnerability. Top 10 of 130+ teams in intern hackathon with a highly scalable live Twitter sentiment analysis scraper.

PIEtech, Inc.
Software development intern, summer 2018. Developed financial web applications with ASP.NET Core MVC and Aurelia TypeScript framework. Gained software architecture and design skills, worked on a small team of interns, worked with analyst interns on model design, including Markov chain Monte Carlo simulation of stock and bond performance.

Extracurriculars

SailBOT
ECE subteam lead, fall 2018 and spring 2019. Heading software development team in the development of event-driven, concurrent robotics software in Python and C.

Math Club
President, fall 2018 and spring 2019. Coordinated talks by faculty members, gave presentations on mathematical topics including social choice theory.

github.com/cabellwg ***linkedin.com/in/william-cabell-16180***