

## Shmuel Berman

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### **EXPERIENCE**

#### **Barnard Programming Languages Lab, Researcher**, New York, NY (Fall 2020-Present)

Used Node.js to implement a live-coding window using the synthesizer CVC4. Discovered and published papers on synthesizing loop-like recursive functions in SyGuS. Worked with a team on improving the AWS resource configuration security tool Häyhä. Led Blockchain Design competition team to find and solve a smart contract vulnerability. Worked under Professor Mark Santolucito.

#### **Quantum Media Group, Intern**, New York, NY (February 2018- July 2019, October 2020 - August 2021)

Met with CEOs and executives of companies including Investing.com, Flewber, Optherium Labs, UNReporter, and Transend. Researched and presented market data and modified advertising and investing plans based on that data. Wrote and published PR releases.

#### **Grace Innovation, Intern**, New York, NY (Summer 2020)

Programmed demos for the company's interactive video engine and interfaced with clients about developing a marketing strategy for their specific needs. Company writer and content editor.

### **EDUCATION**

**Fu Foundation School, Columbia University** New York, NY Graduation Date: 2024, CS Major GPA 4.07

Relevant Coursework: Data Structures, Advanced Programming, Discrete Math, Computational Linear Algebra, Fundamentals of Computer Systems, Calculus I-IV

**The Frisch School Paramus, NJ** Graduated: June 2019  
Salutatorian, GPA 4.0

### **VOLUNTEERING**

**Engineers Without Borders, Pipeline Engineer**(December 2020-Present): Piping committee; designed a pipeline to provide clean, easy to access water to villages in Morocco.

### **SKILLS**

Proficient with extensive experience in Java, Python, C, Javascript(including React and Node.js), Arduino, and web development. Has familiarity with Haskell, C#, NoSQL, and Solidity.

Experienced with version control system git and the Linux code environment(bash). Experienced with AWS CloudFormation resource configuration files as well as deploying basic websites through Firebase.