

Nathan Barnavon

560 Market St. Apt. 411
Newark, NJ 07105

nathanbarnavon.com • barna0308@gmail.com
(954) 849-1361

EDUCATION

University of Florida, Gainesville, FL May 2018
Bachelor of Science: Computer Science GPA: 3.6
Completed Minor: Business Administration

WORK EXPERIENCE

Webb *Software Developer: May 2021 – Nov 2022*

- Utilized WebAssembly for efficient computation of zero-knowledge proofs.
- Implemented CI/CD with Git Actions for simultaneous publishing of CJS and ESM package distributions.
- Built accessible components in Typescript with HeadlessUI and inline styles with Tailwind.
- Reorganized project structure for clear package distribution and project dependency graph.

Motorola Solutions *Software Developer: March 2019 – May 2021*

- Integrated application and FIPS module to support secure communications for APX series radios.
- Supported remote OpenSSL certificate updates for authentication between radio and server.
- Modelled and supported new wifi modems in a finite state machine for communication fallback.

Bauhaus Labs LLC *Software Developer / Researcher: Sept 2018 – Jan 2019*

- Built reusable components in React-Native for mobile application prototyping.
- Utilized GraphQL mutations and queries to fetch and display necessary data.
- Analyzed blockchain applicability and business market potential.

Undergraduate Research Aug 2017 – Jan 2018

- Researched potential firmware level, cache-based side channel attacks.
- Studied x86 and ARM architectures at an assembly level.
- Implemented an attack using the flush + reload technique to recover an AES key.

PROJECT WORK

Overwhelming Equity Lab Feb 2025 - Present
overwhelmingequity.com

- Building computationally efficient client-side poker simulation tools with WebAssembly and Rust.
- Building data visualization dashboards using client-side connections to their poker databases.

University of Florida Big Idea Competition Jan 2016 – Apr 2016

- Created a 50-page business plan for a collaborative music streaming service, Tutto.
- Advanced to the semi-finals out of an initial 80+ teams during the first three months of work.
- Generated pro-forma income statements, balance sheets, and statements of cash flows.
- Argued for proposed FCF and NPV valuations based on written justifications.

Software Skills: Microsoft Excel, SQL, AWS, React, Typescript, Wasm, C++, Rust, Solidity