NATHANAEL JOSEPH BRACY

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School Address
Department of Electrical & Computer Engineering
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359 Hartford Pike
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OBJECTIVE

Highly motivated Computer Engineering major with a broad interest in software development and embedded systems seeking a summer internship.

EDUCATION

ACADEMIC HISTORY

Bachelor of Science, Computer Engineering
Clarkson University, Potsdam, New York   August 2023 – May 2026

- Recipient of a Clarkson Engineering Scholarship in recognition of academic excellence.

Undergraduate Coursework, Computer Engineering
Connecticut State Community College, Danielson, CT   August 2022 – May 2023

Undergraduate Coursework, Liberal Arts
Thomas Aquinas College, Northfield, MA   August 2021 – May 2022

RELEVANT COURSEWORK

- Systems and Signal Processing
- Front-End Web Development
- Data Structures and Algorithms
- Computer Networks
- Embedded Systems

PROJECTS

Shards, Maintainer
https://github.com/servusdei2018/shards

- Shards is an open-source library I created that extends discordgo with seamless integration with Discord's Sharding API.

Yarn Social, Contributor
https://git.mills.io/yarnsocial/yarn

- Refactored auth/login flow to redirect users to the page from which they logged in.
- Redesigned the server-side in-memory cache to resolve issues related to performance and cache consistency.

- Implemented support for feed avatars and descriptions.
- Improved support for Twitter/X feed aggregation.

RavynOS, Contributor
https://github.com/ravynsoft/ravynos

- Implemented automatic mounting of removable media under the /Volumes directory.

Bumble, Contributor
https://github.com/google/bumble

- Implemented an asynchronous write queue for the PacketSink class, ensuring writes are properly awaited.

NVIDIA Container Toolkit, Contributor
https://github.com/NVIDIA/nvidia-container-toolkit

- Introduced shell metacharacter escaping for exec, to help prevent injection attacks.

React Native Windows, Contributor
https://github.com/microsoft/react-native-windows

- Fixed TextInput.isFocused() to correctly handle a null focused input.
- Replaced usage of private function _Starts_with() with C++20 standard std::string.starts_with().
- Replaced an instance of a std::string with a string view, avoiding an unnecessary copy.

SKILLS

- Solid working knowledge of Linux, git, make, and Docker.
- Proficient in microservice architecture and REST APIs.
- Expertise in C++, Go, Python, TypeScript, JavaScript, LaTeX, Markdown, HTML5 and CSS.

MEMBERSHIPS

Institute of Electrical and Electronics Engineers (IEEE)
Clarkson Open-Source Institute (COSI)
Clarkson University Outdoors Club (CUOC)

INTERESTS

Weightlifting, hiking, volleyball, kayaking, pizza.