

# NICHOLAS YANG

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## EDUCATION

2012-2016 Stuyvesant High School  
2017-2021 New York University (GPA 3.8)

## LANGUAGES/TECHNOLOGIES/TOOLS

**Proficient:** Bison, C, Ruby, Rails, TypeScript, Rust, PostgreSQL, JavaScript (ES7), React, GraphQL

**Familiar:** Java, C++, Clojure, Scheme, Haskell, OCaml, Racket, C#

## WORK EXPERIENCE

- 6/19-8/19 Software Engineering Intern, **Microsoft**  
Core Billing and Tax Group. Implementing big data analytics using Microsoft's internal MapReduce tool, Cosmos. Writing data pipelines to process and aggregate petabytes of data. Also contributing to dashboard implemented in React and TypeScript
- 5/18-8/18 Software Developer, **Google Summer of Code**  
Project to add type annotations to the Ruby language. Used Bison and C to modify existing LALR parser in MRI codebase, while updating documentation on the parser.
- 3/17-6/17 Intern, **YouVisit LLC**  
Software development for YouVisit's virtual reality product Experience Viewer. Emphasis on modern web development tools such as React, Redux, RxJS, ImmutableJS, etc. Helped refactor and redesign parts of codebase. Used Agile methodology with JIRA.
- 7/16-10/16 Intern, **Maritime Capital LLC**  
Software development using Ruby, PostgreSQL, and C++. Heavy emphasis on extensible and maintainable code using design patterns.

## SOFTWARE PROJECTS

- 9/18-7/19 HackNYU  
Lead tech team of 8 developers for HackNYU 2019. Designed, implemented and deployed a single page application written in React, TypeScript and Firebase which handled applications, check-in and day-of information. Received over 2000 applications, doubling the previous year's record. Currently rewriting the backend in Rust.
- 8/18- Saber ([git.io/fjdR6](https://git.io/fjdR6))  
A compiler for my own language that targets WebAssembly. Written in Rust. Still in progress.
- 11/17 Microtea.ch ([git.io/vN9zn](https://git.io/vN9zn))  
Uses microservices to teach kids to program. Built using Ruby on Rails with a React/Apollo front end and stdlib microservices. *Won the stdlib sponsor prize at Hack Princeton*
- 7/17-12/17 Stuyvesant Spectator Website ([git.io/vFWCw](https://git.io/vFWCw))  
Website for high school newspaper consisting of two front end applications, the main site and a content management system, written in React, and a GraphQL API written in Ruby on Rails. Deployed using CircleCI and AWS at [stuyspec.com](https://stuyspec.com)