

Boston, MA  
(978) 914-4097

# Nicholas Zuber

<https://nickzuber.com>

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## EXPERIENCE

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### Robin

Senior Software Engineer

Boston, MA

April 2020 – Present

- Leading engineering efforts for building an interactive editor tool designed for creating office maps.
- Designing and inventing geospatial algorithms for solving various challenges in our maps product.
- Coordinate the effort for migrating and refactoring our products to use GraphQL for data fetching, increasing developer productivity.
- Improving the performance of our maps platform such that larger customers experience up to 10x quicker interactions, and load times up to 3x faster.

### Robin

Software Engineer

Boston, MA

June 2018 – April 2020

- Architect and develop the internal data visualization library used across every team in the company.
- Assist in designing and implementing new suggestion based features for 25,000+ users to increase and maximize productivity and usability.

### Box

Software Engineering Intern

Redwood City, CA

June 2017 – Aug. 2017

- Helped maintain and develop features for ClusterRunner, a tool which optimizes test suites for over 100,000 tests internally, is used 1,000+ times each day, and speeds up test feedback by 300x.
- Implemented a caching layer for testing results and build artifacts, using SQLite and an ORM for added flexibility in database integrations.
- Refactored REST API to be able to support breaking changes and preserve backwards compatibility.

## OPEN SOURCE PROJECTS

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### Spectre (SVG editor)

Sept. 2021 – Present

- Engineering a performant and powerful SVG editor library using TypeScript and React, with a UX focus on helping users trace complex shapes.
- Studied different pain points with general-purpose SVG editors by talking with my user-base to help design specific tools that optimize tracing related workflows.
- Developed an algorithm for automatically connecting lines with a perfect curve, solving a common user scenario to save them time and effort.

### Infrared (type system)

July 2018 – Present

- Designing a fluid type system for JavaScript that optimistically finds potential type errors and type inconsistencies completely through inference and advanced type reduction.
- Creating novel algorithms and data structures to solve interesting efficiency related problems using graph theory.

## SKILLS

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### Programming Languages & Frameworks

Proficient in: TypeScript, JavaScript, React, React Native, OCaml  
Experienced with: GraphQL, PostgreSQL, Python, C

## EDUCATION

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### University of Massachusetts Lowell

Spring 2018

Bachelor of Science in Computer Science, Minor in Mathematics

Major GPA: 3.56

Relevant Courses: Machine Learning, Compiler Theory, Operating Systems, Statistics

Honors: Deans List, UMass Amherst Book Award for Computer Science

Hackathons: HackHarvard, CODEX MIT Media Lab, Hackbeanpot, Hawkathon