

# Abizar Bagasrawala

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## EDUCATION

**Northwestern University** – BA & MS in Computer Science

Fall '16 – Fall '21 (Expected)

- **GPA:** 3.92 / 4.0
- **Coursework:** Data Structures, Algorithms, Databases, Code Analysis & Transformation, Systems Programming in Rust, Artificial Intelligence, Machine Learning, Game Development, HCI
- **Teaching Assistant:** Fundamentals of Computer Programming, Human Computer Interaction
- **Research Experience:** Medical pricing datasets with Professor, Crowdsourced delivery algorithms with Professor Zhang.

## EXPERIENCE

**Walmart Labs – Software Engineer Intern** • Sunnyvale, CA

Summer '19

- Enabled new initiative with potential of \$2 Billion by collaborating with product, business, & engineering teams. Contributed 5000+ lines of code in total.
- Led engineering of cross-platform mobile app in React Native amongst team of four engineers. Delivered features such as push notifications, local device caching, & authentication.
- Increased efficiency of data pipeline 6X, reducing runtime from 300s to 50s, by using multithreading & parallelization.
- Submitted contribution request to Walmart's open-source by building new Java library to query Apache Solr using combinations of facets.

**ISO Athletic – Co-Founder & Software Engineer** • Chicago, IL

April '18 – Present

- Acquired 8 Division I basketball teams as clients by co-founding company to let teams track stats & gain analytics.
- Architected & built full-stack web application containing 5000+ lines of code, using Vue.js, Node/Express, & PostgreSQL.
- Redesigned UI/UX of entire app, helping acquire 2018 D1 champions, University of Villanova, as a client.

**Oscillations – Software Engineer (Remote)** • San Francisco, CA

June '18 – April '19

- Single-handedly built & deployed mobile AR experience using React Native, allowing users to choreograph dances in real-time for 3D characters that rise from collectible cards.

**iNet-Web – Software Engineer Intern** • Milwaukee, WI

Summer '18

- Worked in fast-paced agency to design, develop, & ship 3 websites for clients using JS/Node.

**Coco Health – Software Engineer (Part-time)** • Chicago, IL

March '18 – Dec '19

- Independently designed, built & shipped company website for counseling startup at the Kellogg School of Management. Automated bundling & deployment.

## SELECTED PROJECTS

**Lock-free Deque** – Implemented algorithms from research paper to build lock-free double-ended queue in Rust faster than the standard library implementation when run on 64 threads.

**Compiler Transformations** – Built LLVM compiler pass in C++ to perform reaching definition analysis & constant folding for toy language. Placed 3rd in class competition of 20 teams.

## SKILLS

**Languages:** JavaScript/ES6, Java, Rust, CSS, C++, Python, SQL. **Front-end:** React, React Native, Redux, RxJS. **Back-end:** Node, Spring Boot, GraphQL, MongoDB, Apache Kafka, Apache Solr.