# 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 4 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.