Ohad Rau

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## **EDUCATION**

# Georgia Institute of Technology

Atlanta, GA

Bachelors of Science in Computer Science; Concentration: Systems, Architecture & Devices

Aug 2018 - May 2021

o Courses: Object-Oriented Programming, Data Structures & Algorithms, Discrete Mathematics

## Georgia Institute of Technology

Atlanta, GA

Dual Enrollment for Distance Math

Aug 2016 - May 2018

o Courses: Linear Algebra, Multivariable Calculus, Applied Combinatorics, Differential Equations

# North Springs High School

Sandy Springs, GA

Math and Science Magnet; GPA: 94.6/100

Aug 2014 - May 2018

#### EXPERIENCE

## Rolltrax — Attendance Management Services

Atlanta, GA

Founder, Software Developer

Nov 2017 - Present

- o Created attendance management system for student interns, utilized by North Springs during 2018 school year
- Designed user-customizable dashboard for teachers to monitor attendance analytics and statistics
- Used Crystal, ReasonML, React and Postgres to implement the second revision of the website and backend
- Created two mobile applications for teachers and students using Dart and Flutter
- o Implemented badge scanning system using Python and Qt framework

# **Fulton County Schools**

Atlanta, GA

I.T. Intern May 2016 - May 2018

- o Created county-wide kiosk system in OCaml and Ruby for student device technical support
- Utilized ServiceDesk and Destiny APIs to interface kiosk with existing county systems
- Used penetration testing methods to help secure network used by over 94,000 students
- Assisted in preparing and monitoring network infrastructure for over 100,000 concurrent student/faculty devices

#### Projects

- Kesef: Began developing dashboard for stock-trading in Perl6, parsing XBRL documents to analyze SEC filings and tracking volume/price metrics using IEX Trading API.
- Quartz: Designed and began implementation of a programming language for concurrent programming, targeting the Erlang/BEAM Virtual Machine and utilizing a novel algorithm to infer and type-check session types in distributed message-passing programs.
- Nanocaml: Designed and implemented a PPX-powered nanopass compiler framework for OCaml.

#### Extracurriculars

- North Springs Hack Club: Served as president for 2 years, focusing on teaching Scheme and JavaScript programming and successfully planning our first-ever SpartanHacks 24-hour hackathon in April 2018.
- Future Business Leaders of America: Competed at national and state levels for a variety of technology-based events and served as club treasurer during senior year. Helped grow our chapter to over 400 members, bringing it to Big 10 status in the Southern Region as well as Gold Seal status nationally.

## AWARDS

- FBLA Coding & Programming: Received 1st place in Georgia for a "family entertainment center" application built to manage payroll, employee data, and customer statistics using F# and WPF.
- FBLA Desktop Application Development: Received 2nd place at Nationals for an F# application designed to help store and manage FBLA chapter records.

#### SKILLS

- Languages: OCaml, Java, Ruby, F#, C#, Dart, Scheme, JavaScript/ES6, C, Haskell, Prolog, Rust
- Technologies: Functional Programming, OOP, Linux, Debian, NixOS, SQL, React, Google Cloud, Flutter
- Interests: Compiler Design, Systems Programming, Quantitative Finance