

# Osama Esmail

osamabinesmail@gmail.com | (847) 834-1796 | 410 E Green St, Apt #514 Champaign, IL 61820

**GitHub:** /osaesm | **LinkedIn:** /in/osamabinesmail | **Website:** osamaesmail.me

## Education

University of Illinois at Urbana-Champaign

Expected Graduation 05/2021

- BS in Computer Science
- BS in Mathematics

GPA: 3.92

Niles West High School

05/2017

- 4.2/4.0 GPA

## Current Coursework

Systems Programming

Machine Learning

Abstract Linear Algebra (Honors)

## Past Coursework

Computer Science: Intro to Computer Science (Honors), Discrete Structures, Data Structures, Applied Linear Algebra, Computer Architecture, Numerical Methods, Statistics and Probability

Mathematics: Fundamental Mathematics (Honors), Differential Equations (Honors), Real Analysis (Honors)

## Experience

05/2018 - 08/2018 **Full Stack Intern, Illinois Rocstar**

- Developed product website front-ends using ReactJS
- Debugged and improved Python Flask back-ends

10/2017 - 12/2017 **Android Front-End Developer, ForNoJo LLC**

- Develop and debug the Android front-end of a mobile application

09/2017 - 12/2017 **Tutor, America Reads**

- Help kids in the local Urbana-Champaign schools with their math and reading comprehension.

## Skills

- Computer Languages (from most experience to least experience):
  - Python, JavaScript, C++, Java, HTML, C#
- Languages:
  - English (native), Spanish (conversational), Urdu (comprehend), Hindi (comprehend)
- Student Organizations:
  - SIG AI (Artificial Intelligence), Academic Team, Math Contests Group, Billiards Club

## Projects

- Boston Housing Analysis
  - Utilized TensorFlow and libraries to create regression models for housing prices in the Boston Area
- Optimal Rubik's Cube Solver
  - Threaded processes asynchronously in C++ to speed up a Rubik's Cube solver
  - Used CUDA to further parallelize the solver
- Meetup Marker
  - Developed an Android app in Java for spontaneous social events with a friend at HackIllinois.
  - Utilized Google Maps API and developed a Python Flask API for the backend.
- Schedule Optimizer
  - Deployed a ReactJS website (NodeJS backend) with 4 group members for making conflict-free schedules at our university.
- Narc
  - Worked with 4 teammates during a hackathon to make an Android app in Java for sending pictures and locations of handicap parking spot infractions to local law enforcement.
- CS:GOtcha
  - Developed fully functional first-person shooter over Spring 2017 with a friend using Unity3D and various C# & JavaScript scripts.