

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

GPA: 3.33

- BS in Computer Science

- BS in Mathematics

EXPERIENCE

IMC Trading

06/2020 - 08/2020

Quantitative Trading Intern

- Performed analysis on block trading strategies

Amazon

05/2019 - 08/2019

Software Development Engineering Intern

- Contributed to internal subscriptions API written with Spring Java Framework
- Displayed API contributions in internal tool written in AngularJS

Illinois Geometry Lab

01/2019 - 05/2019

Undergraduate Researcher

- Analyzing Champaign County health inspection data to streamline future inspections
- Collaborating to create a machine learning model for the data using TensorFlow

Illinois Rocstar

05/2018 - 08/2018

Software Engineering Intern

- Developed product website front-end using ReactJS, creating new components and overhauling various aspects of the front-end
- Debugged and updated Python Flask back-end, including modifying models, working with NoSQL, and adding new features to be implemented on the front-end

PROJECTS

Crypto Trader

- Implemented Coinbase Pro's API into a simple crypto trading bot

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

Schedule Optimizer

- Deployed a ReactJS website (NodeJS backend) with 4 group members for making conflict-free schedules at our university.

CS:GOtcha

- Developed fully functional first-person shooter over Spring 2017 with a friend using Unity3D and various C# & JavaScript scripts.

RELEVANT COURSEWORK

Computer Science: Algorithms, Programming Languages and Compilers, Intro to Algorithms, Applied Parallel Programming, Systems Programming, Computer Architecture, Numerical Methods, Statistics and Probability, Discrete Structures, Data Structures, Applied Linear Algebra, Intro to Computer Science (Honors)

Mathematics: Complex Variables (Honors), Elementary Number Theory, Abstract Linear Algebra (Honors), Real Analysis (Honors), Fundamental Mathematics (Honors), Differential Equations (Honors)

SKILLS AND INVOLVEMENT

Computer Languages: Python, JavaScript, C++, Java, HTML/CSS3, C#

Frameworks, Libraries and Technologies: TensorFlow, PyTorch, NumPy, Pandas, CUDA, ReactJS, Flask, Git

Student Organizations: SIG AI (Artificial Intelligence), Math Contests Group, Starcourse (Concert group)

Interests: Chicago Bulls, Chicago White Sox, Green Bay Packers, Trivia, Cooking Shows, Futurama