

Muhammad "Osama" Sakhi

U.S. Citizen ♦ (404) 398-1208 ♦ msakhi3@gatech.edu ♦ mosdragon.github.io ♦ linkedin.com/in/mosakhi

EDUCATION

Georgia Institute of Technology

Atlanta, GA

- **Expected Graduation:** December 2019
- **Degree:** Master of Science in Computational Science & Engineering
- **Coursework:** Computer Vision, Computational Science & Engineering Algorithms, Quantum Mechanics

Georgia Institute of Technology

Atlanta, GA

- **Graduation:** May 2017
- **Degree:** Bachelor of Science in Computer Science
- **Concentrations:** Intelligence & Devices
- **GPA:** 3.86
- **Awards/Honors:** Dean's List, Faculty Honors, Asian and Pacific Islander Scholarship
- **Coursework:** Machine Learning, Natural Language Processing, Introduction to Artificial Intelligence, Design and Analysis of Algorithms, Robotics and Perception, Systems and Networks, Applied Combinatorics

EXPERIENCE

Instructor, DukeTIP

Jun. 2018 – Jul. 2018

- Taught a total of 40 students for four weeks across two courses: Modern Programming and Artificial Intelligence
- Designed syllabi, conducted parent-teacher conferences, crafted assignments spanning five core topics: Fundamentals of Python Programming, Web Development, Pathfinding, Machine Learning, Natural Language Processing

Software Engineer, Pindrop

Jun. 2017 – Jun. 2018

- Automated a data collection task that consumes 90 days' worth of data for researchers to create adaptive fraud detection models
- Optimized memory consumption for a new product to use 75% less memory than previous implementations
- Created new framework for continuous deployment of fraud detection models to production systems
- Migrated database records from Postgres to Redis and used custom key-value encoding to optimize lookup times

Teaching Assistant for Introduction to Artificial Intelligence, Georgia Tech

Aug. 2016 – Dec. 2016

- Debugged assignments with students, reviewed course material during office hours, graded course exams

Software Engineering Intern, Pindrop

May 2016 – Aug. 2016

- Designed database performance experiment to help determine which relational database scaled appropriately for the expected load of 1 million requests/day

IT Intern, The Home Depot

Mar. 2015 – Aug. 2015

- Extracted driver's license information from images using Computer Vision and Optical Character Recognition libraries

PROJECTS & RESEARCH

Facebook SUMO Challenge, Dr. Zhile Ren, Georgia Tech

Sep. 2018 – Present

- Adapting 3D object detection algorithm to operate on 360 Degree RGB-D images and produce 3D bounding boxes

Computing Betweenness Centrality for Streaming Graphs, Dr. Oded Green, Georgia Tech

Aug. 2016 – May 2017

- Ported algorithm for computation of betweenness centrality onto NVIDIA GPUs using cuStinger framework

Humor Genome Project, Georgia Tech

Aug. 2015 – Dec. 2016

- Developed web application that crawls Reddit pages for jokes and recommends jokes for users to view and rate

EXTRACURRICULARS

TEDxGeorgiaTech, Student Speaker

Sep. 2018 – Present

- Selected among 70 applicants to deliver a TED talk on mentorship in front of a crowd of 200 students

SKILLS

- **Coding:** Python, C, C++, Golang, Java, MATLAB, MySQL, MongoDB, JavaScript, HTML, CSS
- **Frameworks/Tools:** Scikit-learn, Numpy, Pandas, PyTorch, OpenCV, AWS, Kubernetes, Docker, Flask, Spark, Arduino
- **Software:** Autodesk Inventor, Photoshop