

# HENRY SABA

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## EDUCATION

### GEORGIA INSTITUTE OF TECHNOLOGY

*B.S. Computer Science (Highest Honors)*

- GPA: 3.86
- Concentrations: Devices & Artificial Intelligence
- Certificate: Information Technology Management

**Atlanta, GA**

*August 2015 - May 2019*

### HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY

*University Exchange Program*

**Clear Water Bay, Hong Kong**

*January - May 2018*

### OXFORD UNIVERSITY

*Faculty-Led Study Abroad Program*

**Oxford, UK**

*May - August 2017*

## WORK EXPERIENCE

### Software Engineer and Data Scientist, Lazard (Data Analytics Group)

**New York, NY**

*September 2019 - Present*

- Built multiple automated dataflows with Data Vault 2.0 hashing design pattern to orchestrate daily movement of over 200 million records from various data providers
- Applied different clustering algorithms to guide the firm in coordinating a carpool service for employees returning to work during the COVID-19 pandemic
- Integrating message queues with real-time processing abilities to enable communication across microservices

### Software and Machine Learning Intern, Derq

*Derq uses AI and V2X technologies to predict and prevent road accidents in real-time*

**Dubai, United Arab Emirates**

*June - August 2018*

- Reduced costs of in-vehicle system by 10% by developing Bluetooth application for in-vehicle system to alert for potential collision with vehicles/pedestrians
- Trained and assessed performance of object detection algorithms for usage in traffic safety solutions
- Configured deep learning models on embedded AI computing devices to boost prediction speed

### Software Research Assistant, Vertically Integrated Projects - Robotic Musicianship

**Atlanta, GA**

*August 2016 - May 2017, August - December 2017*

- Developed Python algorithms to identify properties of music such as consonance levels and major-minor tonality
- Implemented module for audio systems to autonomously decide what song to play based on various parameters
- Created interactive app that gathers training data from users for machine learning applications

### Android Development Intern, WhiteBeard

**Beirut, Lebanon**

*June - August 2016*

- Developed Android app that uses BLE beacons to register employee presence in different rooms of workplace to assist management with productivity monitoring
- Improved development time with authentication package that automatically handles various social logins

## PROJECTS

### Automated Instagram Analytics Tool (Personal Project)

- Programmed automated Python tool for Instagram pages to gain unique insights on followers

### Activity Alarm (Hardware Prototyping Class Project)

- Created alarm that goes off if a person does jumping jacks in front of a 22x22 grid of photoresistors
- Implemented multi-class neural network from scratch to aid in accurately classifying physical activity

### Spam Detector for Tinder (Personal Project)

- Reduced fake Tinder accounts in Dubai with an automated object detection algorithm that uses transfer learning from TensorFlow model zoo to identify accounts with fraudulent characteristics in their images

### RestoPresto (Database Management Class Project)

- Implemented general-purpose DBMS for university students to obtain live information about on-campus food trucks while simultaneously allowing food trucks to gain accurate data about consumer spending habits

## SKILLS & INTERESTS

**Programming Languages:** Python, Java, C, C++, C#, Swift, MySQL, R, HTML/CSS/JavaScript

**Technologies:** Airflow, Docker, Prefect Flow, Pandas, Scikit-learn, Kubernetes, Flink, React, Scrappy, Photoshop

**Online Courses:** Master Apache Airflow (Udemy.com), Docker and Kubernetes (Udemy.com), Machine Learning (Stanford University), Deep Learning for Coders (University of San Francisco), Entrepreneurship 101: Who is your customer? (MIT), Agile Project Management (Lynda.com), Complete Web Developer in 2020 (Udemy.com)