

Jonathan Esteban

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EDUCATION:

Massachusetts Institute of Technology (MIT)

Cambridge, MA

Masters of Engineering Program in Computer Systems

February 2022

Bachelor of Science in Computer Science

June 2020

RELEVANT COURSES:

Software Construction, Full Stack Web Design, Embedded Systems, Computer Architecture, Computer Security, Machine Learning, Python, C/C++, Data Science, Algorithm Design and Analysis, Applied Cryptography, Privacy

Languages: Proficient in Python, JavaScript; Familiar with Java, Rust, C#, C++, HTML, CSS, SQL

Software Tools & Frameworks: Git, AWS, GCP, Docker, Kubernetes, Terraform, Unix Command-Line, Vue.js, React, Express.js

Other Skills: Fully Bilingual (Spanish, English), Photoshop, AutoCAD, Makerspace Tools, Microcontrollers, EE Lab Tools

WORK AND RESEARCH EXPERIENCE:

Cybersecurity at MIT Sloan Research Assistant

Cambridge, MA

Graduate Thesis Project

December 2020-present

- Designing a web application to investigate the interaction of automated adversaries operating in simulated enterprise network environments; utilizing open source tools such as Microsoft Battle Sim and D3-force

Virtualitics Machine Learning internship

Pasadena, CA

ML/NLP Team

June-August 2021

- Leveraged ML.NET to implement Time Series Forecasting; ran benchmarks with synthetic and real-world data and conducted competitor analysis for the feature

CSAIL Document Processing Research Assistant

Cambridge, MA

Graduate Project Coordinator

May-December 2020

- Collaborated with 8 fintech companies to coordinate internal project proposals relating to the processing of corporate documents using preprocessing techniques and optical character recognition

MIT Internet Policy Research Initiative

Cambridge, MA

Multi-Party Computation Project

June-December 2019

- Designed the foundation for a web platform that would encapsulate a bare-bones C++ implementation of several cryptographic and multi-party computations
- Setup a MySQL database for the storage of credentials and an SMTP server to handle email tokens
- Followed many security best practices, including salting/hashing passwords, implementing CSRF tokens and CSP headers, as well as creating TLS certificates using Let'sEncrypt

Vivint Internship

Boston, MA

Video Analytics team

June-August 2018

- Worked on circumventing corporate firewalls using NAT traversing servers for WebRTC applications
- Used Docker, Kubernetes, Terraform, and Google's Cloud Platform to automate the setup of said servers and scale the infrastructure

LEADERSHIP AND ACTIVITIES:

Tennis Intramural Team, captain

Cambridge, MA

- Lead my team into the league's finalist qualifications in the Fall 2015 and Fall 2016 seasons

November 2015

Association of Puerto Rican students at MIT events chair

Cambridge, MA

- Served as a student liaison and contributed in organizing a 100+ conference through digital asset creation

March 2016

MIT Undergraduate Practice Opportunities Program (UPOP)

Cambridge, MA

November 2016-June 2017

- Completed an intensive one-week professional development workshop taught by esteemed MIT faculty and industry professionals, which explores topics such as effective communication, foundational decision-making, and teamwork