STEPHEN E. OTREMBA Jr.

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EDUCATION

Massachusetts Institute of Technology – Cambridge, MA Expected June 2021
Candidate for B.S. in Computer Science & Engineering; Minor in Mathematics *4.6/5.0 GPA*

- **Relevant Coursework:** Software Construction, Design & Analysis of Algorithms, Modeling with Machine Learning, Computer Systems Engineering, Probability & Random Variables

WORK EXPERIENCE

Google | Client Side Identity – Sunnyvale, CA May 2020 – August 2020
Software Engineering Intern

- Redesigned secure open source library methods to assist third party web developers with the integration of Google Sign In
- Produced mock websites and UX documentation to demonstrate proper integration and use of Google's sign in products

Outage, LLC | Player Valuation – Boston, MA August 2019 – August 2020
Quantitative Analyst

- Modeled future professional baseball player salaries using machine learning techniques and historical contract data
- Devised and implemented algorithms to assist MLB agents in maximizing contract values in open-market negotiations

Walmart eCommerce | Jet.com – Hoboken, NJ June 2019 – August 2019
Software Engineering Intern

- Created simulation modules in Python for design analysis of next-generation fulfillment center systems
- Developed a cost effective and customizable alternative to the simulation solutions currently used for system analysis

Raytheon | Integrated Defense Systems – Woburn, MA May 2018 – August 2018
Software Integration and Validation Test Intern

- Maintained and utilized MATLAB scripts for the analysis of radar data retrieved from software integration tests
- Engineered a script to streamline the data analysis process by queuing tests to be run on the desired datasets

PROJECT EXPERIENCE

Real-Time Embedded Pictionary System April 2020 – May 2020
Interconnected Embedded Systems Final Project

- Configured an ESP32 microcontroller to play a remote variant of Pictionary with other microcontroller systems
- Designed and implemented a data flow allowing clients to send and receive game information through a central server

Competitive Crossword Puzzle Game April 2019 – May 2019
Elements of Software Construction Final Project

- Programmed client-server software implementing a competitive multiplayer crossword puzzle with an interactive UI
- Enabled the game server to handle an arbitrary number of head-to-head games concurrently

Virtual Reality Driving Simulation January 2018
MIT Momentum Competition

- Received Best Project Implementation Award for a hazardous driving simulator using C#script and the Unity 3D platform
- Linked Windows Mixed Reality headset and controllers to the project to replicate the driving experience

Earth-Imaging Telescope Satellite September 2017 – May 2018
MIT Space Systems Lab

- Assisted in the design and testing of a cube satellite equipped with a novel and inexpensive strip-aperture space telescope
- Constructed and calibrated a testbed to evaluate attitude control systems on a large scale prototype of the system

LEADERSHIP

MIT Pokerbots – Boston, MA April 2019 – Present
Head Instructor, Past: Treasurer

- Direct a coding competition in which participants learn machine learning topics to create a bot capable of playing poker
- Campaign for over $70,000 in company sponsorships and manage club expenses for teaching materials and student prizes

Phi Kappa Theta Fraternity – Boston, MA September 2017 – Present
President, Past: Vice President, Risk Manager

- Manage executive members and serve as a liaison between the fraternity, MIT administration and the City of Boston
- Organize community service events and ongoing fundraising efforts for COVID-19 relief in the Boston area

SKILLS AND INTERESTS

- **Technical**: Python (NumPy, Pandas, Keras, Scikit-learn, SimPy), Java, C++, Git
- **Personal Interests**: Sports Analytics, Teaching, Running and Fitness, Cooking, Los Angeles Dodgers