

# Alexa Jan

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## EDUCATION

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**Massachusetts Institute of Technology** | Cambridge, MA

June 2020

- Candidate for a B.S. in Computer Science and Electrical Engineering, GPA: 4.6
- Minor in Spanish, Certificate in NEET Autonomous Machines
- Relevant coursework: Discrete Math, Embedded Systems, Machine Learning, Algorithms, Control Dynamics and Automation, Robotics, Ordinary Differential Equations, Software Engineering in Java and Python

## WORK EXPERIENCE

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**Apple** | *Camera Engineering Program Manager* | Cupertino, CA

June 2019 - Present

- Drive IR projector and ultrawide camera technology design, manufacturing, and delivery to iPhone and iPad.
- Lead cross-functional team (hardware, software, optics, and operations) and report progress to executives.

**Google** | *Site Reliability Engineering Intern* | Pittsburgh, PA

May 2018 - August 2018

- Reduced critical path of datacenter launch process, resulting in a 40%, multi-day speedup per region.
- Designed and implemented the architecture for progressive machine allocation, in Python, Go, and YAML.

**MIT Global Startup Labs** | *Technical Instructor* | Lima, Peru

July 2017 - August 2017

- Developed a computer science curriculum and taught around 50 undergraduates at the University of Technology and Engineering the technical skills needed to start a company.

**InstaGIS** | *Software Engineering Intern* | Santiago, Chile

June 2017 - July 2017

- Implemented big data management solutions for machine learning algorithms on the CivicBrain product using Apache Spark, improving efficiency by around 30% and enabling job automation.

## PROJECTS AND RESEARCH

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**MIT Global Studies and Languages** | *Spanish Independent Study*

August 2019 - Present

- Research technology's role in human rights violations in Central/South American migrant and refugee crisis and present information in data visualizations and website.

**Center for Brains, Minds, and Machines at MIT** | *Undergraduate Researcher*

December 2017 - Present

- Optimize neural network training in generative adversarial networks by modeling after brain activation.
- Forthcoming publication in MIT Undergraduate Research Journal.

**MIT Driverless** | *Simulation Team*

April 2018 - September 2018

- Developed Gazebo simulation for testing and transferred to car for Formula Student Driverless competition.

**MIT Media Lab: Playful Systems Group** | *Undergraduate Researcher*

January 2017 - May 2017

- Created a room-scale virtual reality visualization game of microbiomes, using Unity and C# for the HTC Vive.

**MIT Urban Risk Lab: PREPHub** | *Undergraduate Researcher*

September 2016 - May 2017

- Designed touchscreen interface for connected neighborhood infrastructure for disaster preparedness.

## ACTIVITIES

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**Class of 2020 Student Council** | *Secretary*

September 2016 - Present

- Organize events for and represent a class of 1,100 students to increase awareness about health issues, foster a strong sense of community within MIT, and connect with the greater Boston area.

**Society of Women Engineers** | *WECode Associate Director of Communications*

September 2017 - May 2018

- Build relations with sponsors and colleges for the largest student-run Women in Computer Science conference, focusing on reach to smaller liberal arts colleges without strong technical programs.

## SKILLS AND AWARDS

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- **Technical Skills:** Python, Java, HTML/CSS, JavaScript, Go, Unity, C#, C++, Arduino, Adobe Creative Cloud
- **Awards:** MIT Global Ambassador (2019), Big Apple Dancesport Challenge–2nd in Latin Ballroom (2017), MIT Club of Northern California Scholarship (2016), US Rowing Youth Nationals–2nd in Lightweight 4 (2016), President's Volunteer Service Award (2014, 2015)