ALEC DEAN

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EDUCATION

Cornell University, College of Engineering **Ithaca, NY**
Master of Engineering in Computer Science *May 2019*
Bachelor of Science in Computer Science *May 2018*

- **Cumulative GPA**: 3.42 | Dyson Business Minor for Engineers
- **Relevant Coursework**: Operating Systems | Discrete Structures | Functional Programming | Artificial Intelligence | Database Systems | Machine Learning
- **Languages:** Python | Java | JavaScript | HTML/CSS | C/C++ | C# | PHP | SQL | Groovy | Bash

PROFESSIONAL EXPERIENCE

MIT Lincoln Laboratory **Lexington, MA**
Lead Developer *August 2018 – Current*

- Led ten member development team in an agile effort to integrate three AI capabilities into the next-generation F-15 jet
- Cultivated employee onboarding pipeline by creating list of documents and tasks, allowing employees to get up to speed faster
- Appended full-stack data flow to containerized microservice architecture using ElasticSearch, React, Kafka, and PostgreSQL
- Stood up DevSecOps pipeline to enable CI / CD for the team using Jenkins and various Java tooling
- Horizontally scaled AWS application using Terraform, Kubernetes, Docker, Istio, and Ansible
- Enhanced features and resolved issues for full-stack web-application using Angular and Spring Boot

Vicor Corporation **Andover, MA**
Software Engineering Intern *May 2017 – August 2017*

- Created front-end customer support interfaces for power sources, improving ticket turnaround time by 30%

TransAct Technologies Inc. **Ithaca, NY**
Operating System Intern *August 2016 – January 2017*

- Collaborated with a small team to efficiently build and test firmware operating systems

LEADERSHIP EXPERIENCE AND PROJECTS

COVID Vaccine Appointment Helper **Boston, MA**
Solo Project *February 2021*

- Implemented Python script to send email alert when appointment became available

Live Public Transit Map **Boston, MA**
Solo Project *December 2020 – January 2021*

- Designed and built aesthetic LED display using RaspberryPi to show live train locations for Boston's MBTA

Autonomous Sailboat **Ithaca, NY**
Project Team Leader *January 2016 – January 2018*

- Managed team of 19 students working to create fully autonomous sailboats
- Developed C++, Arduino-based navigation program that read sensor data and output sail and tail angles
- Designed and implemented team website using PHP, Javascript, and PostgreSQL
- Established and maintained real-time MATLAB simulator to speed up debugging by 80%

Cornell Men's Club Volleyball **Ithaca, NY**
President – Captain – Treasurer *September 2014 – May 2019*

- Operated budget of $10,000 used to fund team competitions and travel

Arduino Sleep Quality Study **Ithaca, NY**
Solo Project *Fall 2014*

- Programmed Arduino using C++ to receive and analyze sleep quality data from six sensors
- Placed the module in local hospital in order to assist with an ongoing Cornell study

SKILLS AND INTERESTS

Spoken Languages: English | Spanish
Interests: Marathons | RaspberryPi / Arduino projects | Volleyball | Coaching | Soccer