Oscar Bjorkman

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#### **EDUCATION**

#### University of California, Berkeley

Berkeley, CA

B.A. Computer Science, GPA: 3.86

Expected May 2023

Relevant Coursework: AI, Algorithms, Machine Structures, Data Structures, Probability and Discrete Math, Lin. Alg, Data Science Techniques Teaching: Data 8 Tutor (paid), Data 8 Lab Assistant

#### **SKILLS**

• Languages: C++, Python, Swift, Java, JavaScript, HTML/CSS

Technologies: Travis CI, Tensorflow, PyTorch, GitHub

• Software: Xcode, Visual Studio, Sketch, Photoshop, Webex

# **EXPERIENCE**

IBM Research Virtual

Research Intern June 2020 - August 2020

- Created novel data center monitoring appliance consisting of a ceiling-mounted hardware component and an on-device machine learning model for video frame analysis using PyTorch
- Designed pipeline for expediting rollout of field-specific chatbots using lexicon generation, an easily augmentable knowledge base, and Watson Assistant

## NASA Ames Research Center, Advanced Supercomputing Division

Mountain View, CA

Research Associate

June 2019 - August 2019

- Developed Python utility for mission planners to assess viability of new lunar campaign designs
- Built cross-platform Electron app for Urban Air Mobility project tied together risk assessment from previous summer, genetic algorithm based scheduler, and map overlay visualization

### NASA Ames Research Center, Advanced Supercomputing Division

Mountain View, CA

Research Associate

July 2018 - August 2018

- o Performed engineering risk assessment on autonomous flight technology using Python to inform policy decisions
- o Created export tool for 70 GB HAZUS census database to SQLite schema for easier cross-platform hooks into Python

botBrain.ai Beijing, China

Machine Learning Engineer Intern

June 2018

- Improved upon LSTM model for Chinese Word Segmentation using TensorFlow yielding 1.6% accuracy increase
- o Deployed model onto existing Amazon Web Services backend and replaced older less accurate model

#### **ABB Enterprise Software**

Vasteras, Sweden

Software Development Intern

July 2017 - August 2017

- o Increased developer productivity through creation of MSTest visualization tools in Visual Studio using C#
- Added to the continuous integration toolset used in enterprise production environment

## **PROJECTS & ACTIVITIES**

### Chief of Staff - ASUC Student Government

August 2019 - Present

- Assisted the Chief Technology Officer in managing 40+ student developers across 4 teams
- Berkeley Mobile Implemented complete redesign of iOS app from scratch using native Swift

# iPhone App Development

2015 - Present

- 6 apps published on Apple App Store
- 2k+ unique weekly active users, 44k+ downloads, 100+ 5-star reviews

# **Botball Educational Robotics**

2013 - 2019

- o Captain, 2019 International Botball Robotics Champions, 4-time NorCal Regional Champions
- Led hardware prototyping, build process, and robot operation at competition

#### **PUBLICATIONS**

• Co-Author: "Risk and Performance Assessment of Generic Mission Architectures: Showcasing the Artemis Mission", Published for IEEE Aerospace Conference 2020