ALI MOHAMMADIAN

alim2@vt.edu - 571-328-9646 - **https://github.com/Alirsgp** - Complete App Store Portfolio: **https://apple.co/2HYn01h**

EDUCATION

- Bachelors of Science in **Computer Science** at **Virginia Tech**
- Expected Graduation Date: **May of 2020**; **GPA: 3.70**

TECHNICAL SKILLS

- **Java** (Very Proficient); **Swift** (Very Proficient); **C** (Very Proficient); **Objective-C** (Proficient); **Git/Github** (Very Proficient); **Python** with **NumPy/pandas** (Very Proficient); **React** (Proficient); **Bash** (Proficient); **Scala** (Proficient); **Julia** (Proficient)

WORK EXPERIENCE

Facebook: Software Engineer (**Pending Start Date: May 2020**)

Goldman Sachs: Software Engineering Internship (**June 2019 - August 2019**)

- Implemented a pipeline in Java to transmit data from lending, Apple Card, and user deposits into a HBase/Hadoop cluster.
- Developed a UI in React for risk teams to view historical customer data with custom time-ranges.
- **Technical Stack**: **Scala** to create **HBase** tables on top of Hadoop's Distributed File System (HDFS) with transformers to manipulate/update data frames, **React** for developing UI for risk teams to interface with.

Virginia Tech Computer Science Department: Undergraduate Teaching Assistant (**Fall Semester of 2018**)

- Assisted students (**Computer Organization I**; CS 2505) with **Linux**, **C**, and **x86 Assembly** coursework.
- Link to course website in which I served as a Teaching Assistant: http://courses.cs.vt.edu/~cs2505/fall2018/

SimonComputing: iOS/R&D Software Engineering Internship (**June 2018 - July 2018**)

- Used TensorFlow to extract single image depth, later to be used to create models of fingers for fingerprint extraction.
- Trained a CNN model for hand alignments, and created an iOS video-app that communicated classifications in real-time.
- **Technical Stack**: **Swift** for live video iOS app, **Tensorflow** with **Python** to extract depth data.

UNDERGRADUATE PUBLICATIONS

- **"*Quantifying Degradations of CNNs in Space Environments*" -** joint research collaboration with the Hume Center under the supervision of Dr. Alan Michaels. (**April of 2019**).
- Link to Paper: https://ieeexplore.ieee.org/document/8904903/
- Published in 2019 IEEE Cognitive Communications for Aerospace Applications Workshop (CCAAW).
- Primarily researched degradation behavior relating to the ResNet architecture.

PUBLISHED iOS APPLICATIONS

LookALike: (**January 2019 - April 2019**; 1 person project)

- Link to application on app-store: https://apple.co/2UX4fSi
- iOS app backed by custom CNN models to classify users to their closest real life celebrity or anime match.
- **Reached top 100 (#78 at high point)** in Family category of the App Store.
- **Technical Stack: CreateML (iOS), UIKit (iOS), Vision (iOS) frameworks. Monetized w/consumable in-app currencies sold as in app purchases.**

FaceRate: (**December 2018 - January 2019**; 1 person project)

- Link to application on app-store: https://apple.co/2Kjw5CH
- Ranks facial features on the basis of having similarities with popular/relevant Instagram personalities.
- **Technical Stack: Swift, UIKit (iOS), Vision (iOS), CreateML (iOS). Monetized w/a one-time premium IAP.**