

ALI MOHAMMADIAN

alirsgp@gmail.com - 571-328-9646 - <https://github.com/Alirsgp> - Complete App Store Portfolio: <https://apple.co/2HYn01h>

WORK EXPERIENCE

Instagram: Software Engineer - Full Stack iOS (**May 2020 - Present**)

- Developed various ad delivery and format strategies for music and other partnered videos on Facebook.
- Utilized a data driven approach to find new, revenue-positive, scalable ad format strategies based off individual user behaviors. Incorporated machine learning from partner teams and multi-group testing methodologies for further iterations.
- Worked on creating social video rooms on Instagram.

Goldman Sachs: Summer Analyst (**June 2019 - August 2019**)

- Implemented an end to end pipeline in Java/Scala to transmit user spending data relating to the Apple Card.

SimonComputing: Software Engineer (**June 2018 - August 2018**)

- Developed and iterated on R&D project involving a computer vision library for touch-less fingerprint scanning/processing.

EDUCATION

- Bachelors of Science in **Computer Science** at **Virginia Tech**
- Graduation Date: **May of 2020**; **GPA: 3.72**

PUBLICATIONS

- **“Principle Component Analysis”** - Research committed under mathematics professor Martin Klaus of Virginia Tech to highlight practical examples of reducing noisy dimensional data from arbitrary datasets utilizing PCA. (**May of 2020**).
 - Link to research paper: https://github.com/Alirsgp/Principal_Component_Analysis
- **”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 research paper, published in 2019 IEEE (CCAOW): <https://ieeexplore.ieee.org/document/8904903/>
 - Primarily researched degradation behavior relating to the ResNet architecture.

NOTEWORTHY MOBILE APPLICATIONS

Cuff: (September 2019 - May 2020; 2 person app startup with a designer)

- Link to application on app-store: <https://apple.co/3h585Rc>
- **Reached over top 200 (#173) in Social Networking category**, rating of **4.8/5.0**, **60K downloads / month**.
- Schedules video calls for users, uses ML to find preferences, variant of stable matching algorithm for matchmaking.
- **Tech Stack:** SwiftUI for native iOS UI, Node + Typescript for backend with Firestore, WebRTC w/Twilio for video chats.

Friends - Live Video Chat: (Feb 2021 - April 2021; 1 person project)

- Link to application on app-store: <https://apple.co/3jTqiIS>
- iOS app that connects users with mutual interests to find friends, enter ad-hoc video calls, and send chat messages.

TECHNICAL SKILLS

- **Java** (Expert); **GCP/Firebase** (Expert); **Swift** (Expert); **SwiftUI** (Expert); **Objective-C/C** (Expert); **Git/Github** (Very Proficient); **Python** with **NumPy/pandas** (Very Proficient); **Bash** (Proficient); **Typescript/Node.js** (Very Proficient); **WebRTC and Twilio** (Very Proficient); **Scala** (Proficient); **Hadoop** (Proficient); **Spark** (Proficient);