

rachit kataria

✉ rachitka@usc.edu 🌐 rachitkataria.me 📞 (408) 218-1005 in rachitkataria 🌐 rachitkataria

work experience

- Facebook - Software Engineering Intern** 09/2018 - 11/2018
- Working on Origami Studio at Facebook's New York headquarters
- Shape Security - Software Engineering Intern | Kleiner Perkins Fellow** 05/2018 - 08/2018
- Worked on machine learning and AI applications for cybersecurity
- Facebook - Software Engineering Intern** 05/2017 - 08/2017
- Spearheaded development of a new text mode in iOS Facebook Stories and added client-side native rendering for crisper quality
 - Launched friend and page tagging on Facebook Stories, making the product more interactive and dynamic
 - Implemented an internal tool to automate QA efforts and built an improved testing flow to speed up development for cross-functional teams
- Apple - Software Engineering Intern** 05/2016 - 08/2016
- Independently designed and implemented a full-stack iOS sample code app for Apple's Developer portal to showcase existing and new features in CloudKit's APIs such as iCloud Sharing for iOS 10
 - During the development process, I discovered and reported many showstopper bugs in various core modules across Apple's software stack and helped to refine CloudKit APIs which were publicly released in iOS 10
- USC ML and Data Mining Research Group - Undergraduate Research Fellow** 11/2017 - Present
- Applying multiple deep learning survival models and data processing techniques to assess patient survival time and risk of death from prostate cancer
- USC Department of Computer Science - Course Producer** 08/2016 - 12/2017
- Teaching assistant for CSCI 104: Data Structures and Object Oriented Design and CSCI 103: Intro to Programming
 - Mentored students on essential OOP concepts (polymorphism, abstraction, concurrency, inheritance), core data structures (linked lists, trees, queues, hash tables), and useful software tools (Github, gdb, Google Test)

projects

- Kaggle Data Science Bowl (USC CAIS++)** 04/2018
- Using Python 3, Keras, and Tensorflow, my team and I implemented a Mask-RCNN model that can detect nuclei in cell imagery. Model detection accuracy performed in the top 10% of all submissions
- Stronger - Helping Opiate Addicts in Their Moments of Crisis (LA Hacks)** 04/2018
- Using Swift 4 and Google Cloud's Vision API, I implemented the speech-to-text recognition and cognitive behavioral therapy features of an iOS app that helps addicts in the moment of relapse
- Claire Bot - Impacting Homeless Youth through Artificial Intelligence (USC TrojanHacks)** 03/2017
- Using API.AI's natural language processing functionality with the Facebook Messenger platform, I created a chatbot that provides resources for homeless youth on the go
- WatchBand - A Real Time Musical Immersion (Stanford TreeHacks)** 02/2016
- Using the WatchKit and Core Motion Swift frameworks, I implemented the accelerometer controller of a watchOS application through which users can strum and drum air-instruments to the beat of their favorite music
- Quark - Interactive Video Manipulation and Audio Playback Control (USC HackSC)** 11/2015
- Using Swift Core Image and AVKit, I implemented video and image filtering for a multiplayer Apple TV app which allows for real-time AV manipulation using iPhone touch gestures and QR code recognition

leadership

- HackSC - USC's Premier Hackathon** 08/2016 - 05/2018
- Director and Head of Logistics
- Spark SC - USC's Premier Student-led Entrepreneurship Initiative** 08/2015 - Present
- Startup Career Fair Advisor (Aug. 2017 - Dec. 2017)
 - USC Hackers Lead (Aug. 2016 - May 2017)
 - Startup Career Fair Lead (Jan. 2016 - May 2016)
 - Safari Bay Trip Lead (Jan. 2016 - May 2016)
 - Hack "Knights" Program Lead (Aug. 2015 - Dec. 2015)

skills

Programming Languages: C/C++, Python, Swift, Objective-C++, Java, HTML / CSS

Operating Systems: iOS, macOS, Windows

Tools: Xcode, Spyder, GitHub, Eclipse IDE, Visual Studio Code

education

- University of Southern California, Viterbi School of Engineering**
B.S. Computer Science 2019
GPA: 3.95 / 4.00
- Lynbrook High School**
High School Diploma 2015
Valedictorian, GPA: 4.00 / 4.00

awards

- Kleiner Perkins Engineering Fellow** 05/2018
Top 2% of 3,000 engineering applicants nationwide selected to join a KPCB portfolio startup, receive mentorship from industry luminaries, and form a close family of talented peers
- LA Hacks - Stronger** 04/2018
Placed 2nd place at the KEEN Innovation & Pitch Competition and awarded \$800 to pursue the project
- TrojanHacks - Claire Bot** 03/2017
Placed in the Top 3 out of all hacks presented at ACM's TrojanHacks 2.0
- Apple App Store Marketing Challenge** 08/2016
Placed 2nd out of 30 intern teams - pitched an innovative product feature idea to Apple's Senior VP of Worldwide Marketing and his executive team
- HackSC - Quark** 05/2015
"Best iOS or OS X App" - Apple
"Best Use of Visual Media" - Disney
"Best First Time Hackathon Hack" - Hack SC
- USC Trustee Scholar** 06/2015
Full tuition merit scholarship awarded to the top 1% of incoming freshman
- USC Academic Achievement Award** 05/2016
Provides a tuition benefit to students with a GPA of at least 3.75 to pursue multiple undergraduate degree objective
- Dean's List Scholar** 12/2015
Every semester since Fall 2015
- USC Viterbi Undergraduate Merit Research Fellow** 06/2015
Research grant of \$2500 / year awarded to the top 40 incoming Viterbi engineers
- USC W.V.T Rusch Undergraduate Engineering Honors Program** 06/2015
Top 10% of incoming freshman engineers
- National Merit Scholar** 06/2015
Awarded by the National Merit Scholarship Corporation to 8,000 exceptional high school students out of over 1.5 million applicants nationwide