rachit kataria

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

■ work experience

Facebook - *Software Engineering Intern*　　　　　　　　　　　05/2017 – 08/2017
- Spearheaded development of a new text mode in Facebook Stories on iOS that leverages client-side native rendering on consumption to ensure crisp photo quality
- Implemented an internal tool to promote client-side QA efforts and built a new, substantially improved testing flow to speed up development for employees across my division
- Presented work to the Director of the Camera & Friend Sharing division and received high praise

Apple - *Software Engineering Intern*　　　　　　　　　　　05/2016 – 08/2016
- Independently designed and implemented a full-stack iOS sample code application for Apple's Developer portal to showcase existing features using CloudKit APIs and a newly released service on iOS 10, iCloud Sharing
- 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
- Presented work to the Director of the iOS Apps & Frameworks division and received stellar feedback

USC Department of Computer Science - *Course Producer*　　　　08/2016 – Present
- Undergraduate teaching assistant for CSCI 104: Data Structures and Object Oriented Design and CSCI 103: Intro to Programming
- Mentoring 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)

USC Teamcore Research Group - *Undergraduate Research Fellow*　　08/2015 – 03/2016
- Applied game theory algorithms in Unity and Java to create a large-scale, robust 3D simulation of current TSA Dynamic Aviation Risk Management System (DARMS) airport protection measures

■ projects

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 the Swift Core Image and AVKit frameworks, I implemented the video and image filtering of a multiplayer Apple TV application which allows for real-time manipulation of video and audio using iPhone touch gestures and QR code recognition

■ leadership

HackSC – USC's Premier Hackathon (800+ attendees)　　　　　　　Present
- *Director and Head of Logistics (Aug. 2016 – Present)*

Spark SC – USC's Premier Student-led Entrepreneurship Initiative　　Present
- *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++, Java, Swift, Objective-C++, HTML / CSS
Operating Systems: iOS, macOS, Windows
Tools: Xcode, Eclipse IDE, GitHub, Visual Studio Code

■ education

University of Southern California, Viterbi School of Engineering
B.S. Computer Science 2019
Overall GPA: 3.93 / 4.00 | Major GPA: 3.96 / 4.00

Lynbrook High School
High School Diploma 2015
Valedictorian, GPA: 4.00 / 4.00

■ awards

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　　　　　05/2016
Fall 2015, Spring 2016, Fall 2016, Spring 2017

USC Viterbi Undergraduate Merit Research Fellow　　　　　06/2015
Research grant of $2500 per 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