

# Eric Chang

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## Education

UC San Diego  
BS Computer Engineering  
Sep 13 – Mar 17  
GPA: 3.42

## Skills

### Languages

C • C++ • Java • HIDL  
Python • JavaScript • SQL

### Frameworks

Android • Spring • Bootstrap

## Experience

Qualcomm San Diego, CA  
Software Engineer Jul 17 – Current

- Working with the Android Connectivity team on data protocol stack development in Qualcomm's Connectivity Engine (CNE) and Radio Interface Layer (RIL) modules
- Extensive use of design patterns and principles to create robust solutions for event driven systems in a multi-process context
- Supported the launch of one of the world's first 5G phones by introducing the DataConnection HAL, an API to receive real-time notifications about 5G resource control on modular devices. This requires complex interprocess communication between multiple processors and radios
- End to end delivery of an API for synchronizing SSL Certificates on Qualcomm's proprietary services with Google's servers. This is used to secure data over GPS, Wi-Fi calling, and any modem SSL
- Implemented an open-source API for setting data preference on dual-SIM phones. Android's Settings app uses this to let the user seamlessly pick which SIM to use data on

Software Engineering Intern Jun 16 – Sep 16

- Enabled Visual Studio compilation for the RF card for unit testing, reducing build overhead by 90
- Wrote a unit test suite for RF card bootup on 15 operators, deployed to Jenkins CI

Calit2 La Jolla, CA  
Research Intern Apr 16 – Jun 16

- Participated in a Gates Foundation project led by UCSD Medical School professors to provide a reliable form of identification for healthcare in third world countries
- Implemented autofocus and dynamic resolution control on a liquid lens camera for Arduino

Kaiser Permanente Pasadena, CA  
Software Development Intern Jun 15 – Nov 15

- Implemented a pipeline of batch processes for consolidating, validating, and transmitting sensitive membership data from multiple sources into 7 million IRS 1095B tax forms
- Contributed to back-end development of a web app in Spring Framework used for actuarial and insurance purposes

Space and Naval Warfare Systems Command San Diego, CA  
Research Intern Jun 14 – Aug 14

- Implemented a CSMA based MAC protocol in C++ for decentralized underwater networks
- Integrated a TCP/IP routing algorithm with different MAC protocols and simulated results on MATLAB