

# Jie Yin

(831)-346-9792 | jyin22@ucsc.edu  
141 Chestnut ST, Apt 217, Santa Cruz, CA, 95060

## Objective

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Seeking for a software development engineer position for 2019 summer intern

## Education

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**University of California Santa Cruz (UCSC)**, Santa Cruz, CA Sept. 2018 – Jun. 2020 (Expected)  
M.S. in Computer Science

**University of Science and Technology of China (USTC)**, Hefei, China Sept. 2015 – Jun. 2018  
M. Eng. in Electronics and Communication Engineering, (GPA: 3.66/4.0) | Supervised by Prof. Zuqing Zhu.

**University of Electronic Science and Technology of China (UESTC)**, Chengdu, China Sept. 2011 - Jun. 2015  
B. Eng. in Optoelectronic Engineering and Optical Communication, (GPA: 3.72/4.0)

## Selected Projects

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### Research Assistant | Intelligent Networking System & Future Infrastructure Lab, USTC

QoS-aware Survivable Networked System with Transparent Resiliency Dec. 2016 - Mar. 2018

- Aimed to design resilient network system to provide high survivability when a single-link of physical layer failures.
- Contributions include 1) Extended the open-source software, OpenVirteX, to support standard optical transmission; 2) Inserted failure alarm module to physical layer to report the single-link failure; 3) Added differential recovery module to the network system to guarantee the 100% survivability against single-link failures in optical networks;

### Research Assistant | Intelligent Networking System & Future Infrastructure Lab, USTC

Algorithm Design and Simulation for Resilient Virtual Software Defined Optical Network. Sept. 2015 - Dec. 2016

- Aimed to develop efficient mechanism to improve resource efficiency and provide high reliability of services.
- Contributions including 1) Designed optimal mapping schemes for efficient use of the bandwidth and IT resources; 2) Added services resilience module to against single control node failure in the networked system; 3) Implemented simulations on *Matlab* and conducted a performance evaluation. Results have been presented at IEEE GlobeCom 2016 conference.

### Research Assistant | Intelligent Networking System & Future Infrastructure Lab, USTC

Design of software defined networking based inter-domain networking systems. Mar. 2015 – Jun. 2015

- Aimed to develop an inter-domain system for the emerging optical network system.
- Redesigned the software defined networking protocol so that it can support multi-domain communication, and implemented it on the sites of USTC and UC Davis.
- Mainly contributed to the extension of the protocol to adapt optical transmission and involved in deploying it in the USTC.

## Skills And Interests

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- Programming Language: good at *C++*, *Python*, *MATLAB*, familiar with *JAVA*, *SQL*, *Bash*.
- Experience in Algorithms, Data Structures, Computer Networks, Machine Learning.
- Interested in backend/infrastructure development, and research positions.

## Top Honors

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- National Scholarship, USTC 2016
- Second Prize, Sichuan Provincial Mathematical Modeling Contest 2014
- First Prize, Mathematical Modelling, UESTC 2013

## Selected Publications

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- [1]. **Jie Yin**, et.al, “Experimental Demonstration of Building and Operating QoS-aware Survivable vSD-EONs with Transparent Resiliency”, *Optics Express*. 2017.
- [2]. **Jie Yin**, et.al, “Demonstration of Survivable vSD-EON Slicing with Automatic Data Plane Restoration to Support Reliable Video Streaming”, *OFC*, 2017.
- [3]. **Jie Yin**, et.al, “On-Demand and Reliable vSD-EON Provisioning with Correlated Data and Control Plane Embedding”, *Globecom*, 2016.