

# Dacheng Li

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## Education

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- University of California, Los Angeles; Los Angeles, California
  - Physics with Statistics minor, anticipated Bachelor of Sciences, 2021

## Skills

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|--|------------------------------|
| • Coding background- Python, C/C++, Bash, VBA, R, Mathematica, ROS | • IoT sensor networks        |
| • Design- Solidworks, AutoCAD Inventor                             | • Machine Learning for ADAS  |
| • Requirements management  | • GNURadio                   |
| • Assembly, Integration, and Test                                  | • CubeSat RF Engineering     |
| • Project management and design                                    | • HAM system design          |
| • Model-based systems engineering                                  | • Data analysis              |
|  | • Statistical model building |

## Major Activity Background and Work Experience

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### Bently Nevada

Intern, Systems engineering Team; June 2019-Sept. 2019

- Worked on development of Orbit 60, Torque, and Ranger Pro conditional monitoring platforms
- Formulated functional architecture flowdowns and managed requirements
- Developed tools to grade existing requirements for testability
- Served as primary contact and translator for Chinese-side systems engineering team

### UCLA Smart Grid Energy Research Center (SMERC)

Student Researcher; February 2019-Present

- Reviewed academic and private research for potential development paths
- Researched knowledge transfer system for testing of ML-driven smart insurance adjustment
- Developed prototype electric vehicle charger in compliance with ISO 15118 standards
- Designed delivery drone with ROS and CAD tools to support CAEV objectives
- Used TensorFlow and LIDAR for ADAS object detection

### UCLA EPSS

Student Researcher; November 2019- Present

- Developed radiometric temperature sensors using SDR technology
- Modeled Martian surface to predict RIMFAX data prior to deployment
- Enhanced Mars 2020 Rover capabilities with instrument modifications

### Bruin Spacecraft Group

Lead Communications Engineer, RAPID- URSa mission; June 2019-Present

- Led planning and development of space-based S-band CubeSat communications system
- Secured data transmissions in conjunction with Command and Data Handling team
- Assisted systems team in development of system model using MagicDraw

Project Manager, Overseer; June 2018- Present

- Assisted development of component systems for high altitude ballooning operations
- Taught Solidworks, machining, and systems engineering skills to inexperienced members
- Improved design for 452% more mass and 121% more flight duration from previous launches
- Led high-level systems management in accordance with technical specifications
- Organized and executed design reviews and team meetings

Lead Systems Engineer, Reach; Nov. 2017- June 2018

- Led development of requirements and documentation with project leadership
- Coordinated development of subsystems in accordance with testing and integration procedures