Dacheng Li

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Education

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

Skills

- Coding background- Python, C++, Bash,
- VBA, R, Mathematica, ROS
- Design- Solidworks, AutoCAD Inventor
- Requirements management
- Assembly, Integration, and Test
- Machining and 3D printing
- Project Management and Design
- Model-based systems engineering
- CubeSat RF Engineering
- Machine Learning for ADAS
- HAM system design

Major Activity Background and Work Experience

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

- Worked on development of Orbit 60, Torque, and Ranger Pro conditional monitoring platforms
- Helped formulate functional architecture flowdown and manage requirements
- Developed tools to grade existing requirements for testability
- Served as primary contact and translator work with Chinese-side systems engineering team

UCLA Smart Grid Energy Research Center (SMERC)
Student Researcher; February 2019-Present

- Reviewed academic and private research for potential future development paths
- Designed multi-sensor rover system for ADAS testing
- Researched knowledge transfer system for testing of ML-driven smart insurance adjustment
- Developed prototype electric vehicle charger in accordance with ISO 15118 standards
- Designed delivery drone with ROS and CAD tools

UCLA EPSS
Student Researcher; November 2019- Present

- Developed radiometric temperature sensors using RTLSDR technologies
- Modeled Martian surface to predict RIMFAX data prior to instrument 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 requirements and model-based systems engineering

Project Manager, Overseer; June 2018- Present

- Assisted development of Mechanical and Software systems for high altitude ballooning operations
- Taught Solidworks, machining, and systems engineering skills to inexperienced members
- Improved design for 352% more mass and 100% more flight duration from previous launches
- Supervised top-level design and build process to ensure launch and recovery
- 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
- Led Systems meetings to discuss development progress and future steps of project