Dacheng Li

https://www.linkedin.com/in/dacheng-li
(352) 316-0034 | dacheng.li3@gmail.com

Education

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

Skills

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

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
- 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 and GNURadio
- Modeled Martian surface to predict RIMFAX data prior to deployment
- Enhanced Perseverance Rover capabilities with instrument modifications

Bruin Spacecraft Group
Project Manager, RAPID- URSa mission; June 2020-Present

- Led redesign of satellite system to ensure compliance with new design goals
- Signatory of Blue Dot Satellite Consortium establishment
- Restructured existing launch schedule for flexibility with COVID-19

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- June 2020

- Assisted development of component systems for high altitude ballooning operations
- Taught Solidworks, machining, and systems engineering skills to inexperienced members
- Improved design for 500% mass and 200% flight duration from previous launches
- Led high-level systems management in accordance with technical specifications
- Organized and executed design reviews and team meetings