

# MICHAEL S. WHITE

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## EXPERIENCE

### WA Design (Part Time)

Designer at Architecture Firm

Berkeley, CA

March 2024 - Present

- Same description as "WA Design" below

### Minex Engineering Corporation (Part Time)

Mechanical Engineer

Antioch, CA

January 2024 - Present

- Same description as "Minex Engineering Corporation" below

### Minex Engineering Corporation (Full Time)

Mechanical Engineer

Antioch, CA

June 2022 - Dec 2023

- Designing & fabricating framework & drive train components for Caltech's DSA-2000 radio telescope prototype antennae
- Extensive SolidWorks modeling & Simulation FEA to validate designs, followed by hands-on manufacturing in-house or coordinating the ordering of parts from outside vendors; participating in machining of parts & assembly tasks
- Writing reports on FEA simulation results, plus creating & delivering presentations both to the direct engineering team to whom Minex reports & Caltech project leadership at design reviews

### WA Design (Full Time)

Designer at Architecture Firm

Berkeley, CA

April 2019 - May 2022

- Creating & executing changes in 2D & 3D CAD software for new construction & remodels of residential projects
- Preparing communication documents for clients & directive documents for general contractors/sub-contractors
- Generate shop drawings for sheet metal parts on projects for which WA Design acts as general contractor
- Collaborate with team members to coordinate aspects of the project (e.g. HVAC & structural engineering)

### Integrated Motions, Inc. (Full Time)

Mechanical Engineer

Berkeley, CA

October 2018 - March 2019

- Lead consulting engineer supporting automation of palm oil fruit harvesting processes for client, by guiding data acquisition systems from conceptual design to manufacture, assembly & test
- Developed C/C++ software for microcontroller; spearheaded component layout, integration, assembly for electrical subsystems
- Assumed role of project manager: communicating with company CEO & client, writing progress reports, ensuring compliance with deadlines/budgets & submitting expense reports, coordinating & collaborating with 3-member engineering team

### NASA Jet Propulsion Laboratory

Close-Clearances Mechanical Engineering Intern, Full Time Summer

Pasadena, CA

Summer 2017

- Modeled thermal blanket elements for clearance analysis in descent & cruise stages of Mars 2020 rover delivery spacecraft
- Responsible for measurement & documentation of critical clearances in Mars 2020 spacecraft; presented this work to Entry, Descent, Landing & Formulation engineers

### Cal Rover Team - American Institute of Aeronautics & Astronautics

Drive/Suspension Team Lead

Berkeley, CA

2017 - 2018

- Oversaw design, modeling & fabrication of NASA-inspired rocker-bogie suspension, wheels & overbar differential system
- Modeled components & assembly in SolidWorks & performed basic FEA on system-critical members
- Participated in design reviews & progress presentations, both with project managers & team members

### Earth to Sky, LLC (Extra-Curricular Activity)

Co-Founder & Participating Scientist

Bishop, CA

2011 - 2018

- Developed & implemented methods for low-cost payload preparation, launch execution & payload recovery for the purpose of conducting stratospheric weather balloon research
- Collected temperature, radiation, & GPS data throughout flight path during numerous space weather events
- Co-author of article "Space Weather Ballooning" published in the American Geophysical Union Journal *Space Weather* (2016); details observations of Pfofzer Maximum & Forbush Decreases

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## EDUCATION

### University of California, Berkeley

B.S. Mechanical Engineering (3.7/4.0)

Berkeley, CA

Graduated May 2018

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## SKILLS

**Computer Languages:** MATLAB, Python

**Fabrication:** Lathing, milling, woodshop, 3D printing, soldering

**Software:** MATLAB, SolidWorks, Fusion 360, Siemens NX, Microsoft Office, VectorWorks, SketchUp