

# JOHN DAVIS

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🌐 GlobalBabble.wordpress.com

## EMPLOYMENT

### Product Development Engineer – PATH

📅 Nov 2021 - March 2022 📍 Seattle, WA

- Performed conceptual and detailed design of hand wash station for clinics and schools in rural, low-resource settings.
- Developed data collection tools for key informant interviews and observational studies to generate design inputs.
- Fabricated prototypes for design verification and testing.

### Disease modeler – UCSD Medicine, Martin Lab

📅 June 2020 – Sept 2021 📍 San Diego, CA

- Led modeling and testing for \$2.3M NIH/NIAID grant optimizing HIV prevention portfolios for people who inject drugs.
- Developed and maintained transmission models to forecast hospital resource needs and intervention scenarios for COVID-19 outbreaks.

### Instructional Assistant – UC San Diego

📅 Sept 2018 - June 2020 📍 San Diego, CA

- Instructed teams of 5-15 undergraduates in project-based humanitarian design program. Set objectives, facilitated discussions, created assignments.
- Supervised undergraduate instructional assistants. Led weekly meetings to communicate program objectives and monitor team progress.

### Product Development Engineer – PATH

📅 Oct 2017 - July 2018 📍 Seattle, WA

- Developed rapid prototyping techniques for vaccine cold chain equipment.
- Performed thermodynamic testing and analysis to improve cold chain handling procedures and to troubleshoot equipment performance.

### Production Engineer – Boeing

📅 Aug 2016 - Oct 2017 📍 Everett, WA

- Integrated manufacturing equipment of over \$1M into 777 production line.
- Developed manufacturing tools from concept to implementation.

## EDUCATION

### M.S. Aerospace Engineering (2020)

University of California, San Diego

- Specialization: System dynamics, disease modeling.
- Master's Thesis: "Modeling reactive case detection for control and elimination of malaria."

### B.S. Mechanical Engineering (2016)

University of Washington

- Semester Abroad: Thailand, Cambodia, and Laos. Courses on globalization, history, and nonprofits.

## VOLUNTEERING

### KiloWatts For Humanity

📅 April 2017 - Present

- Monitoring & Evaluation 'Czar.' Set M&E objectives, design data collection tools, liaise with partners in Zambia.
- Optimize microgrid configurations with HOMER software.

### Engineers Without Borders

📅 Feb 2020 - June 2020

- Led design ideation for drinking water storage project.

### Samaky Foundation

📅 June 2014

- Assisted English teachers in Siem Reap, Cambodia.

## SOFTWARE

MATLAB

Microsoft Office Suite

Google Docs Editors Suite

LaTeX

R

Slurm Workload Manager

