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# Luke Michals

<u>lukemichals.com</u> <u>linkedin.com/in/luke-michals</u> github.com/michals2

## **TECHNICAL SKILLS**

JavaScript | TypeScript | React | Redux | D3 | three.js | Node | GraphQL | TDD | Jest | Enzyme Matlab | Mechanical Design | Creo | CATIA | Manufacturing | Procurement | Project Management

#### **EXPERIENCE**

#### Amazon - Promotions Team Front End Software Engineer | Tempe, AZ

Jun 2020 - Present

- Upgraded legacy applications to NodeJS, TypeScript full-stack CARDS framework
- Maintained legacy code bases through code-reviews, dependency upgrades and documentation improvements
- Addressed high severity issues and maintained continuous deployment pipeline while on-call

## Procore - Invoicing/Pay/Design System Team Software Engineer | Carpinteria, CA

Apr 2018 - Jun 2020

- Led squad technical debt refactoring effort to combine React apps into a single page application
- Coordinated weekly financials frontend chapter meeting to align engineers across R&D
- Created staging area app between Procore and Quickbooks using React-Redux
- Architected application to be used by millions of construction professionals as a "Venmo for construction"

## Booz Allen Hamilton - Staff Technologist | El Segundo, CA

Oct 2017 - Apr 2018

- Created interactive 3D Model Viewer with React, Redux and three.js for advertising and product education
- Collaborated with data scientists to transform trends in political data into visualizations that tell stories
- Utilized TensorFlow Python API to perform object detection on 360° drone video footage

## Boeing - Satellite Antenna System Design Engineer | El Segundo, CA

Jun 2012 - Apr 2017

- Created SQL database and GUI using MS Access to organize and standardize the notes used on engineering drawings
- Developed algorithm for aggregation of standardized stress/dynamics analysis for antenna hardware
- Received World Class Engineer Award (May 2016) for execution of mechanical design activities on various programs

#### UTC Aerospace - Aerospace Mechanical Engineering Intern | Rockford, IL

Aug 2010 - Dec 2011

- Installed accelerometers and pressure transducers to rocket hardware and supervised dynamics qualification test
- Analyzed rocket hardware dynamics test data for space-readiness qualification using proprietary modal analysis software

## **PROJECTS**

## ACD3 - Software Engineer | Open Source Video Visualization Library

2017

- Engineered data flow to handle creation of YouTube and Vimeo video players
- Architected the project website (AC-D3.com), associated demonstration visualizations and deployment to AWS

## HDRA - Mechanical Design Engineer | High Density Routing Assembly

2016

- Devised sorting algorithm for streamlining the process of creating HDRA device waveguide channels
- Awarded patent for novel design aspects of HDRA for use in satellite systems

## **EDUCATION**

University of Southern California | MS Product Development Engineering
University of Illinois (Urbana-Champaign) | BS Mechanical Engineering (Minor: Physics)

2012 - 2014

2007 - 2012