

Santa Barbara, CA
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Luke Michals

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TECHNICAL SKILLS

JavaScript | React | Redux | D3 | three.js | Node | Express | GraphQL | TDD | Jest | Enzyme
HTML5 | CSS3 | SQL | NoSQL | Git | Matlab | Mechanical Design | Creo | CATIA V5

EXPERIENCE

- Procure - Design Systems Team Software Engineer** | Carpinteria, CA Jan 2020 - Present
- Developed reusable UI components for use by internal and external stakeholders
 - Created documentation website using GatsbyJS for organizing reusable components, best practices and documents
- Procure - Invoicing/Pay Squad Software Engineer** | Carpinteria, CA Apr 2018 - Dec 2019
- 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 Procure 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
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PROJECTS

- AC/D3 - 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
- Boeing App Development Team - Project Manager** | Innovation challenge winning pitch to create app development team 2017
- Analyzed viability of frontend MVCs and backend frameworks to streamline Boeing Satellite Systems operations
 - Created and delivered project proposal and project execution plan presentations to management
- HDRA - Mechanical Design Engineer** | High Density Routing Assembly for simplification of satellite waveguide systems 2016
- Devised sorting algorithm for streamlining the process of creating HDRA device waveguide channels
 - Submitted patent application (Aug 2016) of novel design aspects of HDRA for use in satellite systems
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EDUCATION

- University of Southern California** | MS Product Development Engineering 2012 - 2014
- University of Illinois (Urbana-Champaign)** | BS Mechanical Engineering (Minor: Physics) 2007 - 2012
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INTERESTS

Running, Beach Volleyball, Mountain Biking, Wakeboarding, Hobby 3D Printing, Jeep and Dirtbike Tinkering