



## Interchange Design

**Founder & CEO** (*October 2016–Present*) – Built a software platform company that provides artfully designed digital menus for craft breweries, bars, and restaurants. Wrote both the web app and Apple TV app from the ground up using Swift, PHP, MySQL, HTML, CSS, and Javascript. Launched the service publicly in July 2017.

## Gigster

**Product Manager** (*May 2016–March 2017*) – Lead small teams including graphic designers and software developers to deliver high quality, custom websites and apps to clients. Interfaced with clients, wrote product specifications and user stories, and managed budgets and schedules. Clients have included large enterprises (Fidelity) and new startups (Corevity).

## Northrop Grumman Aerospace Systems

### Information Technology

**Information Technology Program Manager** (*2014–2016*) – Managed a multimillion-dollar (\$12.5M) software staffing, procurement, and maintenance budget. Oversaw and led two internal software upgrades totaling \$3.1M. Served as the primary interface and IT strategy lead to a 1,500-person internal engineering organization. Special projects included the IT components of a major staffing and de-staffing effort. Led project teams totaling 26 employees.

### FabLab & Innovation

**FabLab Space Design Lead** (*2014*) – Co-led a 32-person team to design a space that allows engineers to innovate, learn, collaborate and prototype. The space provides an area for collaboration and tools to work with wood, metal, electronics and additive manufacturing.

**Aerospace Systems Innovation** (*2014*) – Served as deputy to the AS Innovation lead. Led innovation community, and served as a liaison for FabLab.

**Integrated Employee Experience** (*2014*) – Collected employee feedback on workplace improvements. Developed an internal website to relay the status of improvement projects and to continue to collect employee feedback.

## Systems Engineering

### *Advanced Mission Program*

**Payload Systems Engineer** (*2014*) – Managed, coordinated, and documented the interface and technical requirements for a spacecraft payload.

### *James Webb Space Telescope (JWST)*

**Sunshield Systems Engineer** (*2013–2014*) – Supported the design and development of the Sunshield. Gave a high-level deployment review to our program management, an internal review team, and our customer counterparts. Led a major trade study on deployment instrumentation over five months to evaluate deployment risk mitigation strategies.

**Alignments Engineer** (*2011–2013*) – Ensured that the Sunshield met its performance requirements when deployed on-orbit. The analysis took into account manufacturing errors and the space environment. Analyzed the baseline design, interfaced with the design team, and evaluated mechanical shims for adjustability based on manufacturing tolerances and environmental effects.

**Lead Mass Properties Engineer** (*Summer 2009, 2010–2012*) – Interfaced with each team on the program to track the mass of their hardware and forecast impacts due to design changes. Maintained a mass properties model and database of the current mass data for the Observatory. Reported the mass status, baseline changes, and margin to requirements on a monthly basis to our program management and customer counterparts. Owned and maintained the Mass Properties Verification Plan and Mass Properties Control Plan.

## Internships

### *Dynamics*

**Cal Poly CubeSat Payload** (*Summer 2008*) – Served as the liaison between Northrop and California Polytechnic University, San Luis Obispo (Cal Poly) on a CubeSat payload project. Defined requirements, project goals and design for ground testing.

**Reaction Wheel Isolator Research** (*Summer 2007*) – Tested and assisted in the analysis of reaction wheel hardware to quantify and evaluate vibration damping methods for use with critical parts and new products.

### *Systems Engineering*

**Space Environments** (*Summer 2006*) – Authored environments document that encompassed the environmental specifications and requirements for space vehicles.

## University of California, San Diego



Bachelor of Science, March 2010

*Major:* Management Science

*Minor:* Mechanical Engineering

## Side Projects & Hobbies

**MEK Studios** (*January 2011–Present*) – My umbrella consulting business that provides web development, graphic design, IT networking, and IT strategy services to local small businesses.

**Campus Loop** (*November 2009–July 2014*) – Co-founded Campus Loop, a startup business targeted at college campuses and launched in 2013. The service was a web platform for college students that centralized listings of campus events and student organizations and monetized itself through classified postings.

**MEK Photography** (*September 2009–2014*) – Photography business I created that provided portrait services and sold prints. The peak of the businesses was a portrait shoot for the cover of Alpha Chi Omega's national magazine, *The Lyre*, in 2013.

## Past Experiences & Awards

- **Bid Team Coordinator & Webmaster** – NACURH\*2010 Conference, UC San Diego (*June 2008–September 2010*)
- **Senior College Ambassador** – University of California, San Diego (*December 2006–March 2010*)
- **Graphic and Web Design Intern** – Shiley Eye Center, University of California, San Diego (*March–June 2009*)
- **Quality Award** – Northrop Grumman, Enterprise Services & Chief Strategy Office, 2015
- **Vigil Honor** – Order of the Arrow, Boy Scouts of America, 2004
- **Eagle Scout with 5 Palms** – Boy Scouts of America, 2000
- **SSBI** – January 2011