Cindy Feng

(626) 322-4101

cindygfeng@gmail.com

cindygfeng.github.io

Graduating with a Masters in Human Centered Design & Engineering June 2020. Grad student in the UW Machine Agency lab focused on hardware prototyping and interaction design. 4+ years of aerospace design engineering experience, mostly in research, design, and testing of structural wing components made of composites. Experienced in both R&D and factory/production environments.

WORK

Boeing Commercial Airplanes, Puget Sound, WA

FLIGHT DECK DESIGN ENGINEER: MARCH 2020 - PRESENT

- Designs and integrates cockpit components and pilot system interfaces adhering to FAA regulations, Boeing requirements, and human factors principles
- Supports flight deck customizations for airline customers

PRODUCT DEVELOPMENT DESIGN ENGINEER: AUGUST 2016 - JANUARY 2020

- Designed and matured structures configurations of airplane wing panels for carbon fiber tape layup, injection molding, 3D printing, and other manufacturing and assembly techniques
- Owned designs of many structural test and other development articles related to composite wing panels; worked with cross functional manufacturing, design, and analysis team
- Submitted 2 patent applications to USPTO focused on automating CAD work
- Supported 777 assembly line in Boeing Everett Factory for 4 months as a liaison engineer

777X WING PANELS DESIGN INTERNSHIP: JUNE - SEPTEMBER 2015

- Designed fuel venting system components for structural efficiency and installation

Hot Wheels, Mattel Toys, El Segundo, CA

TRACKS AND PLAYSETS MECHANICAL ENGINEERING INTERN, JUNE - SEPTEMBER 2014

- Designed and built prototypes from brainstorming stages to pre-production
- Conducted product testing with customers (parents and children); presented findings, made recommendations to Hot Wheels multidisciplinary team, and iterated prototypes of playsets

Sally Ride EarthKAM; NASA Educational Program — *Payloads Staff*

SEPTEMBER 2015 - MAY 2016

- Specialized in satellite tracking; processed thousands of satellite images from the ISS; worked with students and educators to fulfill requests for photos of specific locations

EDUCATION

University of Washington — *Pursuing M.S. Human Centered Design & Engineering*

EXPECTED JUNE 2020

- Capstone project: E-textiles, wearables, and human-robot interactions for stress relief
- Currently researching rapid prototyping machines in the Machine Agency lab at UW
- Physical Prototyping course- Arduino cardboard wind tunnel demonstration
- Digital Fabrication course - created projects using CNC and additive manufacturing
- Other relevant coursework: International User Experience, Information Visualization, Usability Studies, Navigating Design in Organizational Contexts

University of California, San Diego — *B.S. Mechanical Engineering*

SEPTEMBER 2012 - JUNE 2016

- Teaching Assistant for MATLAB undergraduate courses for 8 consecutive quarters
- Senior capstone: 3D-printed airfoils and flapping mechanisms for bird drone

MIT Professional Education — *Cert. in Architecture and Systems Engineering,*

JANUARY - AUGUST 2017

SKILLS

Hardware interaction design

Rapid prototyping and mockups

Machine shop

Geometric Dimensioning and Tolerancing (GD&T)

Designing for various manufacturing techniques

Design for safety and ergonomics

Data processing and visualization

Metallic and composite aircraft component fabrication and assembly

SOFTWARE

3D CAD - CATIA V5, SolidWorks

Abaqus

MATLAB

Adobe Creative Cloud

Tableau

Arduino