Cindy Feng

Design Engineer of flight interiors hardware for Boeing commercial airplanes, with a background in structural design and manufacturing. Experienced in R&D and factory/production environments. Graduated with a Masters in Human Centered Design & Engineering in June 2020, continuing research in human-machine interaction and building human-centered hardware.

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WORK

Boeing Commercial Airplanes, Greater Seattle Area, WA

FLIGHT DECK DESIGN ENGINEER: MARCH 2020 - PRESENT

- Designs and integrates cockpit equipment and pilot interfaces adhering to FAA regulations, Boeing requirements, and human factors principles
- Supports wiring and installation of equipment and electrical components in production line
- Creates installation plans for customized flight decks for airline customer selections

STRUCTURAL DESIGN ENGINEER: AUGUST 2016 - MARCH 2020

- Designed and matured structural configurations of airplane wing panels for carbon fiber tape layup, injection molding, 3D printing, and other manufacturing and assembly techniques
- Owned designs of structural test and other composite wingbox development articles
- Conducted trade studies on airplane configurations with cross functional engineering teams
- Submitted 2 patent applications to USPTO focused on automating 3D 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, fabrication, 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

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 — *M.S. Human Centered Design & Engineering*

SEPTEMBER 2017 - JUNE 2020

- Researcher in the Machine Agency lab at UW - designing and building open-source CNC machines, 3D printers, and makerspace robots
- Capstone project: E-textiles, wearables, and touch-based interactions for stress relief
- 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

Human-centered design

Structural Design

Hardware interaction design

Composite materials

Rapid prototyping and mockups

Machine shop

GD&T

Engineering PLM

Experience with regulatory requirements

Design for Manufacturing

SOFTWARE

3D CAD - CATIA V5, SolidWorks

Abaqus

MATLAB

Adobe Creative Cloud

Tableau

Arduino