Josh Embury

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Professional Experience

Mechanical Design Engineer - Epic Aircraft 8/2021 - present

- Currently serves as primary design engineer to lead design and certification effort for weather radar as an optional installation on the Epic E1000 GX aircraft.
- Leads mechanical design support for Flight Into Known Icing certification project for the Epic E1000 GX aircraft.

Mechanical Design Engineer - The Boeing Company 5/2015 - 8/2021

- Served as primary Mechanical Design Engineer for propulsion system installation for proprietary spacecraft program. Led the design from initial concept development of propulsion system layout through Model Based Engineering (MBE/MBD) build to print package release.
- Served as associate design engineer on structural design of proprietary R&D project for P8 aircraft. Presented design as part of the enterprise standard design process.

Programming Skills

Python, Django, Git, Heroku, BeautifulSoup4, Bootstrap, PostgreSQL, SQL, MATLAB

Personal Projects

Meal Wizard: https://mealwizard.herokuapp.com/

- Developed a full-stack, mobile responsive website for planning weekly meals, generating shopping lists, and sharing recipes with other users.
- Created functionality for new user registration, implemented authorization/authentication, random weekly meal plan generation, and custom user settings configurable on the user profile page.
- User experience customized to show recipes and meal plans created by the user as well as those of users followed.

Twitter Bot: https: https://twitter.com/MeissnerNordic

- Python program to obtain data from the web in order to share the latest cross country ski conditions for the local Nordic ski center on Twitter.
- Data scraping from the web using BeautifulSoup4 and automated tweets posted using the Twitter API.
- Deployed and hosted on Amazon AWS using instance of EC2.

Running Performance Calculator: https://running-performance.herokuapp.com/

- Developed a full-stack, mobile responsive website for predicting future running race performance and ranking past running performances at various distances.
- Implemented prediction of race performance for custom race distances using Grade Adjusted Pace calculations for average gradient input.
- Built application using the Python framework, Django, and deployed to the web with Heroku.

Education

Master of Aerospace Engineering Graduation date: June 2019
University of Washington

Bachelor of Science in Mechanical Engineering Graduation date: March 2014
Oregon State University