BENJAMIN FOLKS

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AEROSPACE-SOFTWARE ENGINEER

Multi-faceted engineer with experience working on project teams in numerous fast-paced environments. Aims to combine Aerospace Engineering Degree, software development experience gained in professional environments, and real-world aviation experience as an *FAA Certified Instrument-Rated Pilot*.

TECHNICAL SKILLS

Python/Django

• SolidWorks 3D CAD

VB.NET/VBA

• Esprit CAD/CAM

- JavaScript/Ember.js
-)/CAM HTML/CSS
- Direct knowledge and understanding of avionics functionality onboard general aviation aircraft
 - o Aspen glass panel Primary Flight Display (Attitude Indicator, Heading Indicator, etc.)
 - o Navigation systems equipped with Dual VOR's, CDI, DME, and GPS (Garmin GTN 650)

WORK EXPERIENCE

RedShelf • Chicago, IL • January 2018 - Present

Web development company providing digital content for educational institutions

Full-Stack Software Engineer

- Work within an active software development team to address product-driven enhancements and JIRA tickets while simultaneously building out new business-driven applications
- Construct unit, integration, and acceptance (Selenium) tests, to complete an initiative to increase coverage across the code-base to over 90%
- Collaborate with numerous development teams in an Agile Environment, using SCRUM methodology
- Created an entirely new application utilizing Django-Rest-Framework and Ember.js
 - Built REST API's to handle CRUD methods, as well as other custom operations, utilized by the front-end Ember application and back-end services
 - Service-based encapsulation for all Python objects, where API Logic Managers are used for all cross-service related queries

AdThrill • Chicago, IL • December 2017 – Present, (Part-Time)

Start-up website for users to watch and rate advertisements (adthrill-prod.herokuapp.com)

Lead Python Engineer

- Successfully created a user-business search algorithm by redesigning model definitions within the Python/Django application
- Deployed the first live production version of the site, followed by continuous enhancement releases

DP Technology - ESPRIT • Rosemont, IL • July 2012 - December 2017

Developer and supplier of computer-aided manufacturing (CAM) software for CNC machine tools

Senior Manufacturing/Software Engineer

- Create technical designs and generate manufacturing processes for concurrent OEM projects
- Build SolidWorks CAD assemblies of dynamic machine models utilized for digital part verification
- Determine processes and tooling necessary for manufacturing aerospace and automotive turn-key parts, in order to produce time studies and fully functional milling/turning programs
- Plan and create VB.NET/VBA applications within the ESPRIT API for automating tool selection and development of machining processes for a range of CNC mills, lathes, and multitasking machine tools
- Travel onsite to aerospace and US government clients to oversee technical projects, including NASA Glenn, Woodward Inc, Northstar Aerospace, Tinker AFB

EDUCATION

Bachelor of Science in Aerospace Engineering
UNIVERSITY OF ILLINOIS • Urbana-Champaign, IL • 2011
FAA Certified Private Pilot - Instrument Rating
Certified SolidWorks Mechanical Design Professional