

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
 - JavaScript/Ember.js
 - VB.NET/VBA
 - Esprit CAD/CAM
 - HTML/CSS
 - Direct knowledge and understanding of flight instruments onboard general aviation aircraft
 - 6-pack Primary Instrument Display
 - Aspen glass panel Primary Flight Display (Attitude Indicator, Heading Indicator, etc.)
 - Navigation systems equipped with Dual VOR's, CDI, DME, and GPS (Garmin GTN 650)
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WORK EXPERIENCE

RedShelf • Chicago, IL • January 2018 – Present

Web development company providing digital content for educational institutions

Full-Stack Software Engineer

- Work within an Agile software development team to address product-driven enhancements and JIRA tickets, while simultaneously building out new business-driven applications using SCRUM methodology
 - Manage Python backend data services for use with internal and external integrations
 - Construct Python unit, integration, and acceptance (Selenium) tests in order to complete an initiative to increase coverage across the code-base to over 90%
 - Built backend REST API's to handle CRUD methods, as well as other custom operations, utilized by an entirely new, internal frontend Ember.js application
 - Create REST API endpoints which authenticate external clients and grant them access to serialized representations of internal data models, based on user permissions
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AdThrill • Chicago, IL • December 2017 – Present, (Part-Time)

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

Lead Python Backend Engineer

- Construct backend Python/Django model definitions to maintain and analyze all relevant user data
 - Create search algorithms to optimize matches between businesses and their target user audiences
 - Deployed the first live production version of the site, supported by continuous enhancement releases
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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 to increase automation of tool selection and 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
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EDUCATION

BS Aerospace Engineering • University of Illinois at Urbana-Champaign • 2011

FAA Certified Private Pilot - Instrument Rating

Certified SolidWorks Mechanical Design Professional