# **BENJAMIN FOLKS**

E: bfolks2@gmail.com • M: (630)-217-5872 1143 W Wrightwood Ave #1F, Chicago, IL 60614

bfolks2.pythonanywhere.com, www.benfolks.com, https://github.com/bfolks2

### 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
- 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.)
  - 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/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
  - o 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
  - o 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