JASON PUL
FULLSTACK SOFTWARE ENGINEER

Summary

I'm an Air Force veteran that obtained a BS and MS in Mechanical Engineering after leaving the service. Following college, I worked in the Aerospace/Defense sector for many years. While working as an engineer, I really enjoyed creating software tools to increase productivity/efficiency. In fact I enjoyed it so much that I decided to pivot my career and attend a coding boot-camp to become a full-stack software engineer. Web applications are headed in a very exciting direction and I'm very interested in working with them to make modern applications. Both for the web and native environments. I have a passion for building things, both physically and through software. I'm a quick learner who is new to software engineering, but not to engineering.

Employment

Northrop Grumman
Survivability Engineer V — Melbourne, Florida — June 2013 to Apr. 2020
- Designed and Optimized Air Vehicle Components
- Designed Test Articles, Developed Test Requirements, and Supervised Test Article Builds
- Executed Tests, Post-processed Test Results, Produced Test Data Packages, and Presented Test Results to Internal and External Customers
- Lofted Computational ElectroMagnetic (CEM) Models, Meshed CEM Models, and Ran Model Predictions Utilizing High Performance Computers (HPCs)
- Developed Software Tools that Automated Tasks (model creation, data processing, etc) and Reduced Design and Analysis Cycle Times
- Lead a Team of 7 Engineers as a Component Lead
- Trained Jr Engineers in Both Theory and Tools Used in Survivability

Sandia National Laboratories
Member of Technical Staff - Structural Dynamics Analyst — Albuquerque, New Mexico — Aug. 2011 to June 2013
- Produced Finite Element Models of Various Systems and Components
- Developed MATLAB Software that Ran LS-Dyna to Fit Simulations to Experimental Results
- Wrote MATLAB Scripts to Allow Production of Hundreds of LS-Dyna Analysis Decks Covering Desired Problem Space for Uncertainty Quantification
- Performed Implicit and Explicit Finite Element Simulations Utilizing High Performance Computers (HPCs)

Northrop Grumman
Engineer I — El Segundo, California
- Performed Aerodynamic and Thermal Elastic Stress Analysis using Nastran
- Collaborated in Designing an Aero-Gel Thermal Conductivity Measurement Device
- Mechanical Lead in Design of Automated Web-Handling Material Qualification and Validation Apparatus
- Produced Vehicle Mesh Models Using CATIA & Patran
- Developed MATLAB Program Enabling Faster Post-Processing of Test Data

United States Air Force
Senior Airman, Enlisted — Wonju, Gangwon, South Korea — Dec. 2003 to Nov. 2007
- Performed Spectral Analysis of Particulate Air Samples
- Deployed Worldwide to Set Up Portable Clean Rooms and Perform Anlaysis
- Maintained Seismic Array and Ensured Data Collections

Projects

JetOut
July 2020 to Current
find the cheapest flights out of an airport without regard to destination

The Jiu Jitsu Guide
Jan. 2020 to Current
TV Guide for streaming Brazilian Jiu Jitsu events

Scavenging Heroes
Jan. 2020 to Mar. 2020
YouTube based game show

Awards

Code Platoon · Best in Show
July 2020
earned the top award for my personal project at coding boot camp

Activities

Brazilian Jiu Jitsu
Fall 2008 to Current
learning and practicing Brazilian Jiu Jitsu

Certifications

AWS Academy Cloud Foundations — Aug. 2020

Contact

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- jasonpul

Education

Mt. San Antonio Community College
Fall 2007 to Spring 2008

University of Southern California
Fall 2008 to Spring 2010
BS Mechanical Engineering 2010

University of Southern California
Spring 2010 to Fall 2011
MS Mechanical Engineering 2011

Skills

SOFTWARE ENGINEERING
Python
NumPy/SciPy
Django
JavaScript
Pandas
React
PostgreSQL
SQL

PRODUCTIVITY/MISCELLANEOUS
Microsoft Office Suite
Torque
LSF
Linux CLI
Matlab

SURVIVABILITY ENGINEER
SWITCH
GEMS
Ram2d
SENTRi
Saber

MECHANICAL ENGINEERING
CATIA
Solidworks
Patran
Nastran
LS-Dyna
LS-PrePost
Cubit
Hypermesh