# STEPHEN MONTANUS SOFTWARE ENGINEER / MANAGER

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# **ABOUT ME**

Throughout my career I have focused my energy and learning on implementing software to solve problems in my business, as well as others. I have been writing software since the 1980's and this has included programming BASIC on early PC's through Visual Basic, PHP, Python, Java, Javascript, and modern frameworks. I have successfully deployed enterprise level Python applications as REST services on Amazon Web Services. In addition, I have extensive experience with presentation layer technologies including HTML, CSS, and Javascript, and modern frameworks and libraries including Angular and ReactJS. I have successfully integrated data tier technologies into projects, both cloud and traditional, including MySQL, JDBC, and various Amazon Web Services data stores.

I have successfully developed and implemented long-term cloud migration strategies that evaluated all software and non-software processes within an organization. These strategies included the migration of traditional software applications to SaaS, the migration of proprietary applications to IaaS or PaaS, the creation of cloud-based applications to replace existing non-software processes, and the retention of certain applications as traditional non-cloud applications.

My current learning interests include developing machine learning applications to support aviation operations, becoming proficient with modern database technologies, including MongoDB and GraphQL, and learning software implementations in CNC and IoT.

# **SKILLS & PROBLEM SOLVING HISTORY**

#### MAR 2017 FREELANCE DEVELOPER - FULL STACK

- Stephen Montanus Software Engineering
- 2 Years, 7 Months
- Created modern web applications that solved specific customer problems including complex product manufacturing, reservations and scheduling, and customer management.

- Developed backend REST interfaces utilizing Python and the Flask framework.
- Created and maintained MySQL databases for customer applications.
- Deployed customer backend systems and database integrations on Amazon Web Services.
- Designed and developed application user interfaces and single page applications utilizing Javascript, JQuery, Angular, ReactJS, HTML, and CSS.
- Integrated external third-party API's into applications including FedEx and Authorize.net.

### FIXED WING AVIATION SUPERVISOR - ANTARCTICA

#### PAE, McMurdo Station

- 6 Months
- Managed day-to-day scheduling and logistics for fixed wing aviation operations for all U.S. activities in Antarctica.
- Developed software solutions that integrated data stored in MS Access databases with Google Earth to manage and visualize location coordinates and fuel cache status.

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 Developed software automations, using VBA, for operational spreadsheets that generated cargo manifests and HazMat declarations.

# PRESIDENT

#### Pacific Airways, Inc.

- 19 Years, 9 Months
- Successfully directed company operations from startup through nineteen years, managing a staff of 25-30 employees at all levels of company operations..
- Oversaw the development and deployment of all company IT projects.
- Developed software solutions for a variety of company problems including tracking aircraft
  maintenance status, managing employee timecards, and automating the cleaning and preparation
  of data for submission to the Department of Transportation.

### **WORK LOCATIONS**

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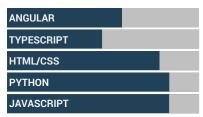
2018

FEB

2000



## **PROGRAMMING SKILLS**



### EDUCATION

MASTERS OF SOFTWARE ENGINEERING
 Brandeis University | 2017

Studies include applying software engineering best practices to design, develop, operate and maintain software systems. Build software solutions using different technologies, architectures and life-cycle approaches. Collaborate and communicate with team members and other stakeholders to achieve software development project goals.

BACHELORS OF AVIATION MANAGEMENT
Ohio University | 1990

Studies included business management, financial accounting, economics, business law, and communication with a focus on the aviation industry.

ASSOCIATE OF AVIATION TECHNOLOGY
Ohio University | 1988

Studies included aviation science, weather, airspace and air traffic management, as well as completion of a Private Pilot's License and Instrument Rating.

# CERTIFICATES

 COMPUTER SCIENCE AND PROGRAMMING USING PYTHON

#### EdX/MIT | 2014 Content included the notion of computation, the Python

programming language, simple algorithms, testing and debugging, introduction to algorithmic complexity, and data structures.

COMPUTATIONAL THINKING AND DATA SCIENCE EdX/MIT | 2014

Content included plotting with the pylab package, stochastic programming and statistical thinking, and Monte Carlo simulations.

GENOMIC DATA SCIENCE SPECIALIZATION
 Coursera/Johns Hopkins University | 2017

Content included the concepts and tools to understand, analyze, and interpret data from next generation sequencing experiments, the most common tools used in genomic data science including how to use the command line, Python, R, Bioconductor, and Galaxy.



### **TECHNICAL SKILLS**

