

# JOSEPH M. SALINAS

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## EXPERIENCE

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Seasoned Product Manager and Data Scientist with 6+ years of experience analyzing data in multiple business sectors to make complex decisions. Proficient in statistical analysis methods developing tools and models for improved decision making. Practiced in running agile product teams, delivering software, and UI/UX design. Aptitude for programming and automation. Skilled in communication across multifunctional team.

## EXPERIENCE

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### **IKIGAI ASSET MANAGEMENT** *Quantitative Engineering Lead – Marina del Rey, CA* 2018-Present

- Lead quantitative trading team designing, testing, building and deploying a systematic automated trading system with 3 direct reports. Teams primary responsibilities included data ingestion/acquisition, data storage/management, strategy development/testing, automated strategy deployment/monitoring and model validation/retrospective. Personally served as primary data validation and model testing engineer, while providing code review for strategy development and deployment along with leading the team.
- Strategy discovery work included ML model implementation and NLP sentiment analysis to explore alternative data for trading signal as well as reinforcement learning for dynamic model design.
- Developed, tested and deployed multiple automated algorithmic strategies using AWS Lambda to manage exchange accounts and make trade decisions.
- Built content dissemination infrastructure through custom Squarespace and Wordpress sites including javascript/css code injection to create unprovided features. Also designed and produced Inaugural Investor Periodical, as well as, pitch decks, brand material, logos and marketing material.
- Introduced Agile product management techniques to multiple verticals including sprint/scrum, retrospective, product ideation.
- Introduced data-driven decision making through web analytics for marketing and product management.

### **GETSTORED** *Software Engineering/Product Consultant – Denver, CO* 2019-2020

- Designed and developed a ReactJS/Ruby on Rails MVP web app for managing client acquisition from SEM pipelines for a mobility startup focused on on-demand personal storage to bridge gap between long-term corporate storage and self-storage industries. (<https://getstored.com>)
- Guided four long-term mobility industry CEO board members through concepts of technology driven product design and implementation.

### **NOBLE MARKETS** *Product Manager – New York, NY* 2017-2018

- Managed software development for a Foreign Exchange collateral management and settlement platform for a Financial Tech startup. Projects included development of a new web UI using the Angular4 framework, design and review of workflows for foreign exchange physical settlement methodology, development of cryptocurrency custody solution to expand settlement opportunity for the company.
- Developed a new product that allows for collateral management of intraday trading and directly manages settlement of net positions allowing fast access to liquidity in fiat-crypto markets.
- Handled client relations for the development of managed NDF and spot transactions for two exchanges.
- Experience managing full stack development and designing user experience (UI/UX) for user testing.
- Joined the company as employee 37 and have helped manage education and training through massive growth to 100 employees in 6 months.

### **SPACE EXPLORATION TECHNOLOGIES** *Responsible Turbomachinery Engineer – Los Angeles, CA* 2012-2017

- Responsible Engineer for the Merlin 1D and MVacD turbopumps that run the engines for the Falcon 9 Rocket. Perform health monitoring and acceptance for every pump tested and flown on an engine. Assembled multiple development and flight units and oversaw the process management for a team of technicians dedicated to assembly of the part for flight. Review issue disposition and verification for non-conforming hardware.

- Developed as part of a team 3 iterations of upgrades to the turbopump over 5 years to continuously improve reliability, performance and manufacturability for SpaceX's Falcon 9. Each upgrade includes design, development testing, design reviews, customer certification, and qualification testing.
- Developed a tool to compute the axial thrust balance on the turbopump rotor system using analytical, empirical and numerically derived models that were anchored directly to measured data. Built a custom GUI and integrated tool for the engine balance to provide a simple interface for data analysis by test engineers. Model has been used to redesign upgraded hardware and is used to validate engine.
- Developed python tool to query SQL databases and match with test performance data for easy hardware status across the propulsion department.
- Built MATLAB GUI tool to facilitate visual inspection and measurement of flaws in hardware that minimized required engineering support time to validate health and reduced dedicated man-hours by more than half.
- Built automatically formatted, filterable run charts and summaries from large data sets of testing using Excel VBA, MATLAB and python to track performance for engine validation.
- Conducted multiple anomaly investigations for hardware failures experienced during development testing as part of a multi-discipline team. Conducted timeline reconstruction of events leading up to anomaly and fault tree analysis for probable cause leading to implementation of design changes to mitigate risk and improve hardware reliability.
- Traveled to launch site to perform inspection and repair of suspect hardware on F9 Flight 10 vehicle that successfully returned the vehicle to safe configuration for successful flight. Supported multiple on-site inspections and hardware installations at company's test site in McGregor Texas.
- Performed design and analysis of hardware using both 3D modelling software and analytical models to develop hardware. Executed bench testing of hardware to validate models and verify flight readiness.
- Completed official qualification reports and presentation after performing post-test campaign inspections of hardware for NASA, Airforce, DoD and commercial customer review. Documented and presented material for design review process throughout engine development.

#### **ADDITIONAL EXPERIENCE**

- Smart home technology development focused on providing temperature control devices to automate room-by-room preference prioritization to reduce energy usage without sacrificing comfort. Learned swift to develop iPhone App, python for back-end analysis, MySQL for database management and C++ for device control.
- Designed, assembled and tested components of two compressor rigs for diffuser flow mapping and surge characterization.
- Designed, prototyped, manufactured and tested four composite body UAVs as part of a team. Lead for structures group. Additional work in system optimization aerodynamics and composite manufacturing.
- Developed and tested Attitude Determination and Control System models for three active global imagery satellites operated by a global satellite imaging company.

#### **EDUCATION**

**MASSACHUSETTS INSTITUTE OF TECHNOLOGY** • Cambridge, MA

*2009-2013*

- BS in Aerospace Engineering, June 2013
- Selected Coursework: Feedback Control Systems, Principles of Automatic Control, Computational Methods, Statistics and Probability, Java, Differential Equations, Multivariable Calculus, Complex Problem Solving, Lean/Six-Sigma Methods

#### **TECHNICAL SKILLS**

- Programming: Python, MATLAB, SQL, ReactJS, Swift, Java, C++, HTML/CSS/PHP, Microsoft Office/VBA, UNIX, Fortran, AVL, XFOIL, TypeScript/Angular4, MySQL, Ruby/Ruby-on-Rails
- Data Science Libraries: Pandas, Numpy, Matplotlib, Scikit-learn, json, requests, boto3
- Machine Shop: *CNC Machining, CNC Foam Cutting, Water Jet, Composite Layups, 3D Printing*
- Computer Aided Design: *NX, Fusion 360, SolidWorks, AutoCAD, ANSYS*

**References available upon request**