Simon Hochmuth

M.S. Data Scientist | Relocating to New York City

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EXPERIENCE

Senior Consultant - Data Scientist | DOD

Washington, DC Mar 2023 - Present

- Senior member of the CFO workforce analytics team, managing ETL pipelines, SQL servers, .NET applications, and Tableau dashboards to enhance data accessibility, modernization, and decision-making.
- Developed scalable forecasting models, predictive analytics tools, and classification models to analyze structured datasets, workforce trends, and business performance, delivering strategic insights to drive product improvements and business growth initiatives.
- Performed feature analysis and data quality assessments on data pipelines, identifying key variables and optimizing transformations to enhance reporting accuracy and data integrity. Implemented validation techniques to ensure consistency across data streams, improving decision-making reliability.
- Designed automated ETL workflows to process and integrate large-scale financial datasets, enabling real-time budget execution tracking in Tableau and web applications, automating CFO reporting, and delivering timely insights for executive decision-making.
- Conducted scenario-based forecasting, hypothesis testing, and simulation analysis to assess the impact of product changes and leadership decisions, enabling early signal detection and data-driven planning.

Booz Allen Hamilton

The Pentagon, VA July 2021 - Mar 2023

Senior Data Scientist

- Lead developer consulting DOD senior leadership on the Incident Response (IR) team dedicated to digesting complex requirements and building analytical tools. The goal was to build a shared, real-time, comprehensive view of the common operational picture.
- Built and deployed ETL pipelines to integrate structured datasets, enabling analytics reporting, forecasting, and experimentation support for operational decision-making.
- Forward-deployed data engineer collaborating with military service members to gather requirements, develop data models, and optimize data structures for advanced analytics and reporting, aiming to strengthen data governance for the DoD.

CACI International Bethesda, MD July 2020 - July 2021

Associate Data Scientist

- Engineered software integration solutions and conducted statistical modeling, hypothesis testing, and predictive analytics on structured datasets using Python and SQL to support product experimentation and business analytics.
- Created dashboards and conducted case studies using Python, SQL, MongoDB, Grafana, and MATLAB. Performed predictive analysis and generated daily reports on ship data utilizing VBS, Python, and MATLAB scripts.

AgustaWestland

Philadelphia, PA

Flight Control Software Engineer

June 2018 - July 2020

- Collaborated with engineers to define system specifications, develop and conduct test plans and procedures for aircraft development, and troubleshoot software integration issues.
- Analyzed time-series data to validate flight safety, assess system performance, and detect anomalies, supporting data-driven testing.
- Simulated and modeled aircraft dynamics to evaluate flight software updates, ensuring flight safety during helicopter development.

Lockheed Martin-Sikorsky

Systems Engineer

Shelton, Connecticut Aug 2016 - Aug 2017

Supported requirements management for electronic and software systems on the Royal Canadian Air Force CH148 helicopter program, addressing financial, technical, and schedule risks across functional teams for mission-critical systems.

EDUCATION

University of Maryland Global Campus - Masters of Science - Data Science

2024

- Relevant Coursework: Decision Management Systems, Data Visualization, ML & Predictive Modeling, Big Data Analytics
- Machine Learning: Regression, KNNs, NLP, Random Forests, SVMs, Chat Bot, NNets, Deep Learning, Gradient Boost

University of Maryland, College Park - Bachelor of Science - Aerospace Engineering

2018

LANGUAGES AND TOOLS

Python, R, SQL, NoSQL, Pandas, NumPy, Scikit-Learn, TensorFlow, Keras, PyTorch, XGBoost, Decision Tree, SARIMA, Clustering, Spark, PySpark, K-Means, Time Series Forecasting, Machine Learning, Plotly, GitHub, Grafana, Linux, Databricks, MongoDB, Hadoop, MATLAB, Data Visualization, Olik, Tableau, BASH, C#, JavaScript