Sarah Jane Schmidt

Ex-astronomer creating data-driven solutions to problems here on Earth.

EXPERIENCE

Data Scientist

everphone, Berlin May 2021 - present

- Developed and deployed an automated airflow pipeline to ingest current device resale data and calculate recommended prices using statistical and machine learning techniques.
- Built a system to forecast customer demand for new and upgraded rentals.
- Modeled 2M rows of device resale data to predict future prices for thousands of smartphones and tablets.

Research Fellow

Leibniz Institute for Astrophysics, Potsdam September 2015 - September 2020

- Led a four person team that predicted the ages of small stars using five different indicators from multiple large datasets.
- Combined time-series data with stellar characteristics extracted from multi-dimensional data to calculate the energy released from hundreds of stellar outbursts.

Research Fellow

The Ohio State University, Columbus September 2012 - August 2015

- Pioneered a new method to model sparse time-series data of stellar magnetic outbursts using chi-squared minimization.
- Used regression analysis to calibrate trends between the chemical composition of a star and its observed color.

Research Assistant

University of Washington, Seattle September 2006 - August 2012

- Extracted and cross-matched data for twelve thousand stars from five different databases to identify trends in the evolution of stellar magnetic fields.
- Wrote custom code to process thousands of multi-dimensional data files to measure the temperature of magnetic stellar outbursts.

EDUCATION

PhD in Astronomy

University of Washington August 2012, Seattle

BA in Astronomy & Physics

Barnard College June 2006, New York City

TECHNICAL SKILLS

Expert

• Python (Pandas, Numpy, Matplotlib)

Proficient

- Github
- Airflow
- Bigquery/SQL
- Python (FastAPI, Seaborn, Scikit-learn, Scipy)

SCIENTIFIC SKILLS

Expert

- Regression
- Classification
- Data visualization
- Hypothesis testing
- Statistical reasoning
- Dimensionality reduction

Proficient

- Forecasting
- Data cleaning
- Clustering (k-nearest neighbor & random forest)

LANGUAGES

- English (native)
- German (B1)

Sarah Jane Schmidt

Data Scientist Resume, page 2

COMMUNICATION

- Written: Authored more than <u>60 scientific papers</u>.
- **Presentation:** Delivered over 30 seminars to both specialist and general audiences.
- Workshops: Led workshops on data visualization, inclusive mentoring, and vocal technique.
- **Teaching:** Designed courses and delivered lectures for three university classes.

MANAGEMENT

- **Supervising:** Direct manager for two team members.
- **Project:** Mentored ten students through data-focused research projects.
- **Team:** Led weekly team research meetings.

LEADERSHIP

Member, Berlin SHE Choir

2016 - present

<u>SHE Choir</u> is a collectively run feminist a capella choir. I frequently arrange music, conduct songs, lead meetings, and run workshops.

Member, FemSo

2018 - present

FemSo (short for feminist solidarity) is a small feminist activist group that practices non-heirarchical leadership. I have run feminist trivia nights and currently co-facilitate our book group.

Council Member, Quibson Raiders

2021 - present

The Quibson Raiders are a 300+ member international LGBTQIA+ guild that plays Elder Scrolls Online on the EU server. I am a community moderator and event leader.

Chair, COINS

2017 - 2019

COINS is the Committee on Inclusion in <u>SDSS</u>, a 2,000 member international astronomical collaboration. We worked on collaboration policy, performed and analyzed yearly demographics surveys, and ran inclusion-focused programs.

PROJECTS

Gender Questions Project

2017-2020

Designed and analyzed a survey to quantify gender-bias in how audiences question conference presenters, published the results, and used our findings to train moderators in best practices.

Femso Library

2019

Collaboratively gathered and indexed dozens of books to found a small feminist theory library that was closed shortly after the pandemic began.