

# Stefano Meschiari Ph.D.



As a Data Science leader, I work cross-functionally to create, evolve, and deliver data science solutions that are practical, usable, and trustworthy. I ensure success by fostering alignment across Product, Design, and Engineering, tearing down communication barriers and semantic gaps, and advocating for customer value. I lead teams through the full research and development lifecycle, while supporting individuals' professional growth.

## Skills

**Machine Learning:** Supervised and unsupervised classification and regression. High-performance statistical and numerical methods. Time series analysis and forecasting.

**Data Science and Engineering:** Architecting high-volume ETL and machine learning pipelines on AWS EMR using Spark, SparkML and H2O. Building components from MVP to production using R, Scala, Python, SQL, JavaScript, Java, and C. Creating interactive tools and reproducible research reports for company-wide consumption.

**Leadership:** Mentoring from junior to senior positions. Scoping complex tasks, evaluating risk and impact, and acting as a data advocate across multiple teams. Researching knotty problems with curiosity and rigor. Designing technical interviews. Explaining complex concepts to stakeholders with clarity and empathy. Creating knowledge value via clear presentations, technical reports, and workshops.

## Recent Work Experience

### SENIOR TECHNICAL LEAD

Oct 2021 - Dec 2021

### TECHNICAL LEAD

May 2019 - Nov 2021

### SENIOR DATA SCIENTIST

Jul 2017 - May 2019

### Duo Security (Cisco)

- Led the research and development of the data science platform that powers **Duo Trust Monitor (demo)**, Duo's threat detection solution.
- Collaborated with Product and Design teams to seamlessly integrate machine learning and effective data presentation into Duo's product, prioritizing usability and customer trust. Worked closely with customers to understand their use cases and validate new capabilities.
- Coordinated Data Science and Engineering work to ensure alignment, manage expectations, and hit delivery milestones.
- Led team through growth from 1 to 10 IC members, navigating substantial organizational change. Mentored 5 peers in data science and engineering. Served as interim manager for multiple data teams as required. Developed technical interviews on research, algorithms, and ML architecture.
- Researched supervised and unsupervised algorithms tailored to the security domain, focusing on simplicity, explainability, and scalability.
- Worked with domain experts to translate cybersecurity knowledge into expert rules and heuristic layers that complement ML models.
- Developed ETL and ML infrastructure to process data, build models, and surface threats and authentication anomalies at scale.
- Created reports, dashboards, and prototypes that guided technical and UX decisions. Delivered presentations, demos, and trainings internally (for engineering, sales, and VP-level executives) and externally.
- Submitted 2 patents to USPTO, including a first-inventor patent for our proprietary ML algorithm for threat detection.

PRODUCT DATA  
SCIENTIST  
Feb 2016 - Jun 2017

W.J. MCDONALD  
POSTDOCTORAL  
FELLOWSHIP  
2012 - 2016

SAVE/POINT,  
PRINCIPAL  
INVESTIGATOR (UT  
SEED PROGRAM)  
2014-2016

## Civitas Learning

- Created and improved on machine learning pipelines and tooling to model university student outcomes. Improved the custom modeling platform, reducing batch training and scoring running time and cloud costs by half.
- Developed new ML models and custom classification algorithms (in R/ Caret, SparkML, and JavaScript) and back-end data APIs for internal services.
- Developed applications that surfaced institution-level insights and visualizations, empowering Sales and executives with timely data-driven talking points and facilitating new partnerships and upsells.

## University of Texas at Austin

As a researcher, I divided my time between conducting research in theoretical astrophysics and exoplanet detection, building open-source libraries and tooling for the astronomical community, and devising apps and games for astronomy education curricula.

- Led the data analysis effort for the Lick-Carnegie science collaboration (~20 scientists across the United States). Analyzed high-value time series data captured with Keck, APF and Lick telescopes. Created an IDE and libraries for modeling this data, *Systemic*, which have been used to discover more than 40 new planetary systems by multiple teams.
- Developed high-performance, highly parallelized code packages to simulate planetary formation on UT supercomputer clusters.
- Funded to develop two educational applications. *Super Planet Crash* was played more than 15 million times and covered by The Verge, IO9, Huffington Post, and others. *Systemic Live* was used by Caltech, UF, UT, MIT, SJSU, Yale, Columbia, and Coursera to teach students about data analysis and modeling.

## Education

**Doctor of Philosophy** (Astronomy & Astrophysics, 2012), University of California at Santa Cruz. Received class year's prize for highest achievement in research, coursework, and teaching.

**Master of Science** (Astronomy, with highest honors, 2006), University of Bologna.

**Published** 8 first-author refereed publications on time series analysis, optimization, and physical simulations (cited 437 times); a total of 17 refereed publications (cited 1,444 times).

## Contact

Website: [www.stefanom.io](http://www.stefanom.io) • Email: [stefano.meschiari@gmail.com](mailto:stefano.meschiari@gmail.com) • [LinkedIn](#) • [GitHub](#)

*Reference contact information is available upon request.*