# Soysal Degirmenci

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### Summary

Machine Learning leader with proven track record in driving AI strategy and delivering impactful AI solutions.

### **Experience**

Fieldguide San Francisco, CA

Staff Machine Learning Engineer

2023/07 - current

- Founding member and the strategic driver of the AI team. Scaled the team from 0 to 11 engineers while being hands-on technical lead and manager of 5 direct reports.
- Architected and helped launch Field Agents, an enterprise agentic AI system that autonomously executes audit workflows with human-inthe-loop oversight, securing \$XMM pilot with a top 10 CPA firm.
- Co-defined company's AI vision and long-term roadmap with CTO, delivering features that generated \$X MM in ARR with YYY+ WAU.
- · Led product prioritization and strategic planning for Al initiatives across multiple product areas.
- Designed and executed hiring strategy for ML roles and closed multiple critical hires.
- · Supported client engagements with large CPA firms through product demos, feedback sessions and strategic planning.

Amazon San Diego, CA

Senior Machine Learning Scientist

2021/01 - 2023/07

- Technical ML Lead in an applied science team under retail division, focusing on enhancing Amazon's safety and supporting selling partners.
- Worked on managing fraud risk with ML and employing LLM-based agents to address Amazon selling partner issues.
- Developed a Reinforcement Learning based approach that improved top line by 11% while reducing scientist hours spent by 80%.
- Prototyped and supported deployment of autoregressive offline simulators for several risk programs, increasing the top line by an estimated 5% on average.
- Lead author of NeurIPS 2022 Offline RL Workshop paper: "Benchmarking offline reinforcement learning algorithms for e-commerce order fraud evaluation".

Brain Corp. San Diego, CA

Machine Learning Engineer

2020/01 - 2021/01

- Led ML work on inventory scan project for real-time shelf inventory insights in grocery stores, leveraging data collected by robots.
- Utilized image metadata enrichment, object detection, image processing, data monitoring and visualization, supervised machine learning to improve insight accuracy.
- Developed technical requirements of AI products for external partnerships.
- Supported pilots with retail companies, now deployed in over 500 stores in the US.

# ID Analytics, a Lexis-Nexis Risk Solutions company

San Diego, CA 2016/04 - 2020/01

Senior Data Scientist

- Developed credit risk assessment ML models used by large US companies across industries.
- Designed and developed a novel ML-based identity verification product for efficient customer onboarding.
- Led the initiative to build an internal tool for end-to-end model building tool for identity fraud risk assessment, reducing model development time by 85%.
- Oversaw a team of 4 scientists, evaluating data sources to improve core ML product performance; reduced data evaluation time by 75% on average.

## Education

### Washington University in St. Louis

St. Louis, MO

PhD, Electrical Engineering

2011/08 - 2016/04

• Dissertation: A General Framework of Convex Optimization Using Jensen Surrogates and Acceleration Techniques

### **Middle East Technical University**

Ankara, Turkey

BS, Electrical and Electronics Engineering

2006/08 - 2011/06

## Skills

- Coding: Python, SQL, TypeScript, C, C++, Java, JavaScript, MATLAB, Rust
- Machine Learning and Data Science: Pandas, Jupyter, Torch, Tensorflow, Keras, XGBoost, LightGBM, scikit-learn, Sagemaker, Kafka, Spark, Hive, Snowflake, Tableau, PostgreSQL, DynamoDB, Supabase
- Other: AWS, Docker, LaTeX, Git, ROS, Next.js, Node.js, React, CSS, HTML, bash