

ANTHONY GALCZAK

Email | LinkedIn | GitHub

EXPERIENCE

Senior Data & Applied Scientist

June 2022 – Present

Microsoft - Team: CX Data Science, Experimentation

Remote

- Tech lead for research, development, and architecture for Experiment Insights Framework.
 - EIF is an experimentation analysis library w/ CI/CD, dashboarding, and automated pipelines. *Python, Azure*
 - Azure Pricing Calculator experiment adding \$5.5M LTV / yr. Featured internal science publication. *Python*
 - Support dozens of technical & non-technical users, coordinating feature requests & statistical consultations.
- Experimentation v-Team Lead for 5: Code reviews, work prioritization, branding & strategy, mentoring.
- Measuring Copilot (LLMs/ GPT-3.5&4) effectiveness for several major product launches.
 - DS Lead on DfM Support Copilot Wave 2.5 & 3.0 studies, critical product insights. 50k+ agents. *Python*
 - DS Lead for internal MSFT Support Copilot continuous measurement and psuedo-experimentation. *Python*
 - Driving Azure Copilot RAG system improvements, such as scaling QnA validation data. *Python*
- Leading product development on EIF Causal Inference in collaboration across MSR organizations. *Python*

Software Development Engineer

August 2021 – June 2022

Amazon.com - Teams: CPP AI Research, Anomaly Detection & Classification

Remote

- Designed and wrote AutoML benchmarking suite for 1000s of binary/ multi-class classification tasks. *Python*
 - Produced top model: improved performance with 80% win rate vs. incumbent model ensemble.
- Launched new metric for AutoML classification tasks against Amazon.com catalog, "Coverage @ Precision K".

Software Development Engineer Intern

August 2020 – November 2020

Amazon.com - Teams: Classification & Policy Platform, AWS Deep Engine-Science

Remote

- Developed, benchmarked, and released new BERT-based tabular ML algorithm, [TabTransformer](#). *Python*
- Added API to [AutoGluon](#) for inputting unlabeled data and performing semi-supervised learning. *Python*

Python Dev Intern

June 2020 - August 2020

Akuna Capital - Team: Data Access Layer

Remote

- Wrote PySpark data retrieval system to process high volume streaming from Kafka. *Python, Spark, Hadoop*

Software Development Engineer Intern

June 2019 - September 2019

Amazon Web Services - Team: AWS AI ML Solutions Lab

Seattle, WA

- Wrote template assignment heuristic to increase pairwise matching accuracy. *Scala, Spark*
 - Improved overall AUPRC on deployed AWS record linkage system, [AWS FindMatches](#), by 14%

R&D Year-Round Intern

September 2015 - June 2019

Sandia National Labs - Teams: ICADS Platform(DevOps), ICADS MAUI (Software)

Albuquerque, NM

- Co-led funded research for new ML algorithms on satellite anomaly detection, "Data Clustering". *Python, C++*
- Wrote big data CLI tool with 100+ users for multi-modal satellite data retrieval. *Python*
- Redesigned build tool for monolithic system using Clang. Reduced builds from 30 mins to 10 mins. *C++*

EDUCATION

Stanford University

Stanford, CA

Master of Science: Computer Science, specialization in Artificial Intelligence

Sept 2019 – June 2021

- Course Assistant CS103: 5 quarters
- Research Assistant at Stanford Artificial Intelligence Lab: 2 quarters
 - Video understanding for [pedestrian intent prediction](#) (autonomous vehicles) *Python*

University of New Mexico

Albuquerque, NM

Bachelor's of Science: Computer Science

Bachelor's of Science: Applied Mathematics

TECHNICAL SKILLS

Languages: *Python*, Java, Scala, SQL, Kusto, C++, C#, Matlab, R

ML: Retrieval Augmented Generation (RAG), Transformers, NLP, NLU, CV, AutoML, PyTorch

DS: A/B experimentation, Bayesian Inference, Causal Inference, regression analysis

Engineering: Git, Spark, Azure, Docker, AWS, CI/CD (Jenkins, Azure pipelines), Linux enthusiast