

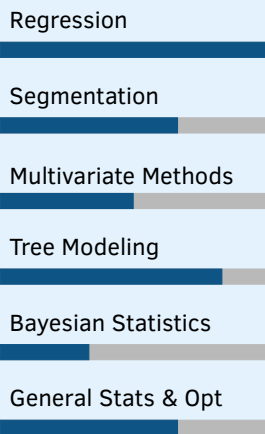


Christian Tillich

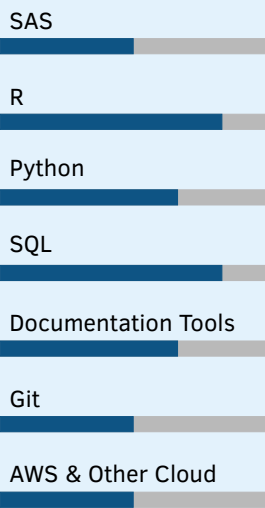
Data Scientist



Stats



Code



The skill scale is from 0 (Used Once in College) to 6 (Expert). 3 implies ability to plan and complete average tasks within accurate and reasonable timelines.

About Me

Hello, I'm an analytically-minded Data Scientist with over a decade of experience in both model production, as well as deep-dive analysis making sense of model behavior. I prefer roles with a strong hands-on component, and prefer to lead through soft power and subject-matter-expertise as opposed to formal leadership roles. My latest passion has been experimenting with how LLMs can assist in fully-automated unsupervised learning

Work Experience

Numerator	Data Science: Panel Science	May 2020 - Present
<ul style="list-style-type: none">Designed AutoSeg, an Instant marketing segmentation modeling with LLM-in-loop processes for naming and descriptions. Reduces segmentation turnaround from weeks to days, and is valued at ~\$2.5 million / year in the first year.Prototyped RNN-based tool to extract packaging type from images of CPGs. Quoted precision at 70% with 60-70% recall.Designed Brand Strength Model - an SEM relating survey attitudes to actual market behaviors for individual panelists. Fully automated process valued at \$50k per engagement.Designed Allocation V4 - distribution based model relating Projected Sales to Projected Households.Developed numerous internal tools to assist with day-to-day DS functions<ul style="list-style-type: none">Python wrapper for Insights APILightweight model development framework for rapid local experimentation.Other DS tooling to improve Snowflake workflows.		
Uptake	Data Science: Assessments	Mar 2019 - April 2020
<ul style="list-style-type: none">Constructed machine learning models to assist manufacturing clients in diagnosing and troubleshooting common failures on assets.<ul style="list-style-type: none">Anomaly detection models to capture errant behavior on stamping presses.Rare-event prediction models to detect chock bearing and spindle failures for well-known steel manufacturer.Unsupervised classification to clean operator labels in work-order data.Converted client engagements in the Mining and Manufacturing space.Assisted in efforts to evaluate new technologies relevant to Data Science work.		
Avant Credit	Data Science	Jun 2016 - Mar 2019
<ul style="list-style-type: none">Constructed machine learning models for the portfolio, including:<ul style="list-style-type: none">Core underwriting model for prime population.Competitor underwriting models using alternative consumer credit sourcesUnsupervised segmentation model for targeted marketing.Modeling suite to enhance refinance target logic.Monitored models performance for degradation, suggested remedies and rebuilds.Built, documented, and maintained a shared automated reporting/preprocessing toolsets for the team.Trained and informally managed new team members		

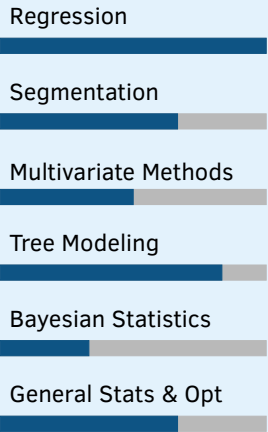


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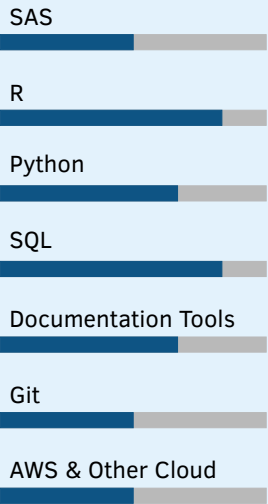
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Avant Credit Business Analytics Sep 2015 - June 2016

- Designed critical long-term risk forecasting tool.
 - Linear regression to turn unintuitive underwriting score into sensible 12-month risk metric
 - Custom curve-fitting optimization to map 12-month risk to marginal risk curve over life of loan.
 - Tool accurately forecast losses during a period of high risk and low access to capital.
- Performed investigative data analysis on several topics.
 - Optimal way to quantify debt to income.
 - Reverse engineering competitive products from credit report tradelines.

Enova Financial Research & Platforms Dec 2014 - Sep 2015

- Researched the efficacy of non-linear modeling strategies.
- Developed unsupervised learning model to tag call center notes on a variety of topics.
- Designed and maintained core analytics Data Mart.
- Evaluated the efficacy of voice-to-text translation software for call center.

Enova Financial UK Business Analytics Jan 2014 - Dec 2015

- Designed profit-maximizing loan amount optimization tool. Raised average loan amounts by \$60 and expected net return by 7%.
- Led all analytics efforts in major legal overhaul. Salvaged \$5 million in above worst-case scenarios.

Enova Financial CA/AU Business Analytics Aug 2010 - Jan 2014

- Identified and fixed key failures of underwriting engine.
- Created LTV calculator used to optimize digital marketing allocations.
- Informally managed team of 2-5 analysts working on different aspects of the underwriting engine.
- Identified and shut down *ad hoc* fraud pockets on the two products.

Enova Financial Fraud/Operations Analyst Jun 2008 - Aug 2010

- Developed critical reports that allowed us to open operations after massive fraud attack.
- Wrote and implemented a number of consistency checks to catch operational and development errors and report back to stakeholders.

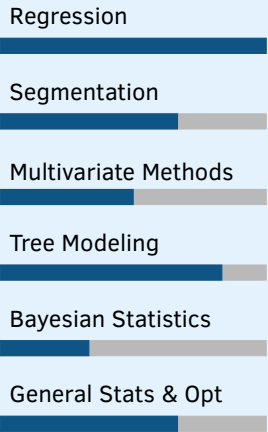


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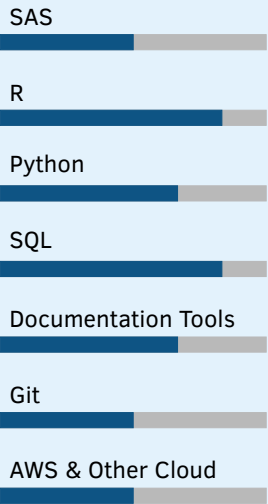
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Academic Research

Research Assistant

Granato Research Team

Sep 2006 - Sep 2007

- Prepared samples for experiments.
- Prepared preliminary findings for NSF grant proposals.

Research Assistant

CERI Research Team

May 2006 - Aug 2006

- Wrote Matlab scripts to determine theoretical surface depth from excessive loading.
- Wrote Unix shell-scripting to ETL raw GPS data into usable Matlab objects.
- Presented research to peers at 2 day conference in Oregon.

Education

University	Degree	GPA	Years
DePaul University	MS Statistics	3.9/4.0	2012 - 2015
University of Illinois - UC	BS Physics	3.6/4.0	2004 - 2008