








Christian Tillich

Data Science

 June 1986
 Chicago, IL.
 847-863-7162
 [github/christiantillich](#)
 christian.tillich.walker@gmail.com

Statistics

Linear/Logistic/GLMNet
Tree Methods - RF & XGB
Clustering
Factor/Path Analysis/Markov
Bayesian Statistics
General Stats & Opt

Programming

R
Rmd & LaTeX
SAS/Python
SQL (Postgres & Hive)
Git
Excel (+ Solver + VBA)
MatLab/Mathematica/Other

The skill scale is from 0 (Fundamental Awareness) to 6 (Expert)

Work Experience

Avant Credit

Data Science

Jun 2016 - Present

- Constructed key underwriting models for the portfolio.
- Monitored models performance for degradation, suggested remedies and rebuilds.
- Developed a marketing segmentation model using unsupervised learning methods.
- Built, documented, and maintained a shared automated reporting toolset for the team.
- Built, documented, and maintained a tool for managing data preprocessing.
- Contributed to a repository of shared functions and tests.

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.

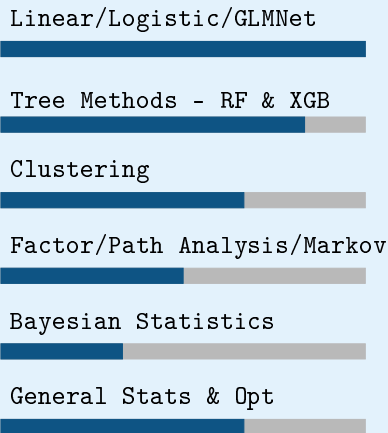


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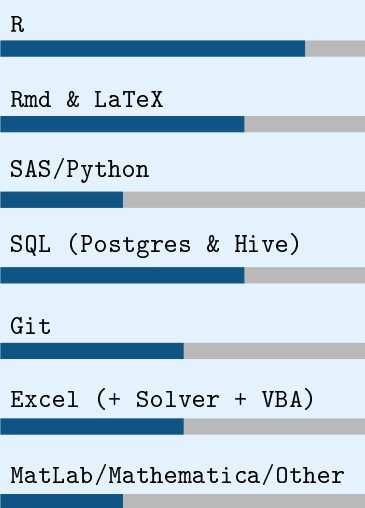
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Programming



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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/development errors and report back to stakeholders.

Education

DePaul University MS Statistics 2012 - 2015

GPA: 3.9

University of Illinois - UC BA Physics 2004 - 2008

Minor in Philosophy GPA: 3.6

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.