Christian Tillich

Data Science

- June 1986
- Chicago, Il.
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Skills

Python

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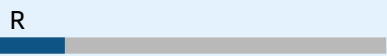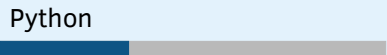
The skill scale is from 0 (Fundamental Awareness) to 6 (Expert)

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 Analytic

- 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/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.