

Timothy Kyle Thomas

✉ timothykylethomas@gmail.com 🏠 timothykylethomas.me 📱 tkthomas27

Work Experience

Bank of America

Charlotte, NC

AVP, QUANTITATIVE ANALYST

September 2018 - Present

- Customer valuation and media measurement team in the Analytics and Information Group
- Used the **R-Python-SQL** data science stack to drive insights into customer value and portfolio dynamics
- Maintained R Learning Hive and hosted monthly R Office Hours
- Presented on various data science topics such as logistic regression, decision trees, and time series clustering

Harvard Business School

Cambridge, MA and Delhi, India

RESEARCH ASSOCIATE

September 2012 - August 2018

- Primary responsibilities included data collection, cleaning, and statistical analysis for faculty research projects. Select projects:
- Used **Python** and **regex** for **web-scraping** of SEC's archive of corporate filing.
- Used **machine learning** algorithms to cluster company stores based on geospatial data from ArcGIS and US Census bureau.
- Created **SQL** database of employee and store data to study the impact of managerial decisions on churn.
- Applied econometric techniques such as instrumental variable **regression** and fixed effects for impact evaluation.
- Developed interactive **Shiny** app for quick analysis and prototyping of publication quality visualizations.

Roby Realty

Charlotte, NC

FREELANCE WEB DEVELOPER

Sept 2015

- Used **HTML**, **CSS**, **JavaScript**, and **PHP** to develop a dynamic, mobile-friendly website for a real estate startup.

Select Published Materials

Cases in Business Analysis and Valuation

Harvard Business Publishing

AUTHOR

- *New Constructs: Disrupting Fundamental Analysis with Robo-Analysts*: New Constructs faces business challenges and technical hurdles in engineering an NLP pipeline to deliver accurate financial information from corporate filings at scale.
- *Air Products' Pursuit of Airgas*: Challenges students to parse the financial analysis of management in an ongoing takeover fight.
- *Walgreen and Alliance Boots*: Explores the economic and social implications of pursuing a tax inversion.

Continuing Education

Georgia Tech

Atlanta, GA

MASTERS OF SCIENCE IN ANALYTICS

September 2018 - Present

- Courses in Regression, Computer Science, Business Management, Financial Modelling, Data Science, and Simulation

Harvard University

Cambridge, MA

HARVARD EXTENSION SCHOOL AND HARVARD COLLEGE

Sept. 2013 - May 2017

- Econometrics (**A-**): Rigorous overview of topics such as time series and instrumental variables using linear algebra and calculus
- Quantitative Methods in Economics (**B+**): Introduction to statistics via economic applications
- Building Dynamic Web Applications (**A-**): Built interactive web applications using Javascript and PHP
- Capital Markets and Investments (**A**): Built reproducible documentation in R for portfolio tracking

Degrees Earned

Harvard Divinity School

Cambridge, MA

MASTERS IN THEOLOGICAL STUDIES (**GPA: 3.75**)

Sept. 2010 - May 2012

- Concentration in Buddhism; 2 years of Sanskrit, 1 year of Chinese, Summer intensive course in German

Furman University

Greenville, SC

BACHELOR OF ARTS (**GPA: 3.56**)

September 2005 - May 2009

- Double Major in Philosophy and Religion; courses in Logic and Finite Mathematics

Extracurricular

Web Development; Data Analysis in R and Python

Charlotte, NC

PERSONAL DATA PROJECTS

Ongoing

- I maintain a blog and a Github that tracks my ongoing data projects written in Jupyter and RMarkdown notebooks. The website was originally written in a Python framework.
- Financial Scatter Plot App: a proof of concept Shiny dashboard I created to visualize the relationship between financial metrics.
- Weather Comparison: a fun Shiny app for comparing weather with different cities.