# **Stephen M. Lee**

https://stephenlee.info

615.944.4486

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# **Education**

### **University of Chicago:** *Chicago, IL*

* M.B.A Class in Competitive Strategy **Winter 2019**

### **University of Memphis:** *Memphis, TN*

* M.S. Computer Science **Winter 2019**
* M.A. Economics **2018**
* B.S. Physics **2013**

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# **Skills**

### **Computer Programming**

* *Web Development*  Django (Python); Angular 8 (Typescript); Bootstrap (CSS / HTML); AWS RDS.
* *Data Science*  R with tidyverse, Python with pandas, numpy, and keras; MATLAB; SQL; AWS EC2.
* *Machine Learning* Neural networks; Decision trees; Clustering; Recommendation systems.
* *Econometrics* Fixed and random effects; Causal inference; Discrete choice; Probit/logit; ARMA; VAR.
* *NLP*  LDA; LSTM neural networks with GloVe embeddings; Multinomial inverse regression.

### **Teamwork**

* *Project Management* Agile; Git version control; Experience with distributed teams; Test driven development.
* *Public Speaking* Conference and workshop presentations, with and without PowerPoint.

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# **Employment**

**Federal Reserve Bank of Chicago:** *Research, Finance Department* **2019 – Current**

* I co-author the Finance memo used to brief the bank President before each FOMC meeting.
* Research includes a study of information in Board of Governors speeches using natural language processing (NLP), interest rate pricing of bank loans using confidential Y14 bank reporting data, and the effects of the announced corporate credit facilities in response to COVID-19 (PMCCF and SMCCF).

**University of Memphis:** Research Assistant, Economics and CS Departments **2016 – 2019**

**Fanatics Apparel**: *Planner* **2015 – 2016**

**Professional Golf** **2013 – 2015**

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# **Selected Projects**

**BookLocal Travel Solutions:** Co-Founder **2017 – Current**

* Authored the first standard for renting assets on a blockchain (ERC-809), and wrote smart contracts (in Solidity) to implement a hotel distribution system on the Ethereum blockchain.
* Pivoted to an access control system, and, with one other co-founder, built a property management system that controls and schedules codes for a Z-wave connected smart lock (Angular, Go, MySQL).

**xyzNews:** Master’s Thesis **2019**

* I trained a LSTM neural network to identify the source of a news article based on the article text.
* Built a web interface to use it (Python with keras and flask).

**Money Stuff Newsletter to Audio** **2019**

* I wrote a program that scrapes my email for my favorite newsletter (Money Stuff by Matt Levine), converts it to an MP3 using the AWS Polly service, and saves it in a publicly shared Dropbox folder.