# Stephen M. Lee

615.944.4486 smlee.981@gmail.com github.com/slee981

#### WORK EXPERIENCE

## **Blockchain Consultant:** Hade Technologies

2018

- Performed a forensic audit after claims of suspicious trading behavior on their token.
- Found and reported a vulnerability with several decentralized exchanges, saving millions of dollars in fraud.

### **Co-Founder:** *EthMemphis*

2018

- Business focused Ethereum hackathon and workshop event with \$4,000 awarded in prizes.
- Led the planning and operations from idea through implementation.
- Managed website content, design, marketing, and communications and brought in 3 of our first 4 speakers.

# **Blockchain Consultant**: Hade Technologies

2018

- Audited the smart-contracts used in their initial coin offering (ICO).
- Rewrote and deployed updated token in a three-day turnaround to fix issues found in audit.
- Suggested and created a company GitHub page for transparency.

## **Research Assistant:** Economics Department, Fogelman College of Business and Economics

2016-2018

 Computationally solved for and graphed the equilibria space in a paper that explores optimal advertising cost and selling price under limited consideration sets. Paper forthcoming.

# **Planner:** Fanatics Apparel

2015-2016

- Informed senior management by sending and maintaining daily sales reports.
- Reduced waste by working with the COO to reorganize thousands of garments on the production floor.

## **EDUCATION**

#### University of Memphis, Memphis, TN

M.S. Computer Science: Teaching Assistant

Current

M.A. Economics: Research Assistant

2016 - 2018

- **B.S. Physics and Mathematics:** Cum Laude

2013

- o Four-year starter on nationally ranked Division-1 golf team.
- Competed in the 2011 PGA Tour FedEx St. Jude Classic.

#### TECHNIAL SKILLS

# Data Science and Web Scraping

- Python including beautifulsoup, requests, selenium, statsmodels, scikit-learn, and pandas libraries.
- Machine learning algorithms including recommendation systems, neural networks, SVMs, and decision trees.
- Amazon Web Services (AWS) for cloud computation (EC2), storage (RDS) and SQL for database queries.
- eViews for timeseries analysis including ARIMA, GARCH, and VAR models, ACF and PACF graphs.
- STATA for panel and cross-sectional data including logit, probit, and fixed effect modeling.

### **Ethereum Blockchain**

- Solidity for test driven smart-contract development on the Ethereum network including professional experience building on the openzeppelin-solidity library.
- Basic Javascript and web3.js library experience for front-end interactions with the Ethereum Virtual Machine.
- Truffle framework with Infura for development, testing, and deployment to various networks.
- Designed and proposed a standard interface for renting non-fungible assets in ERC809.

# **CURRENT PROJECTS**

# **Research:** Cryptocurrency Analysis with Twitter Data

2018

- Question..... Are cryptocurrency prices correlated? Do the frequency or sentiment of "tweets" impact the price?
- Data........... Trade level price and volume data from major European exchange. Twitter "tweets".
- Analysis...... Cointegrating vector analysis, Granger causality tests, and fitted TGARCH models.
- Tools........... Python; eViews; and Amazon Web Service EC2 and RDS instances.

## **Co-Founder:** BookLocal Travel Solutions

2017-2018

- Problem..... Duopoly of online travel agents creates high commission rates and lopsided legal agreements.
- Solution..... Decentralized hotel room distribution and guest booking services.
- Use............ Made first ever hotel room booking on the Ethereum blockchain at EthMemphis (proof-of-concept).
- Tools...... Truffle; Solidity; Javascript; and Mocha for testing.