

Stephen M. Lee

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

TECHNICAL 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.
- Experienced in MATLAB, R, Mathematica.

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.