Juan Lasheras

(201) 314-6280 juan.lasheras {at} gmail {dot} com juanl.org, github.com/jlas US Citizen

Skills Proficient Python, C, JavaScript, kdb+/q, Git/SVN/hg, HTML5/CSS3, GNU/Linux

Knowledgeable Java, C++, Lisp, PHP, SQL/NoSQL, Machine Learning, Realtime, AWS/Cloud, Windows, Agile

Work U.S. Securities and Exchange Commission

*New York, NY*June 2015 - Present

Senior Software Engineer (Contractor)

• Lead dev for the National Exam Analytics Tool (NEAT).

- o NEAT programmatically analyzes millions of trades to detect fraud.
- Oversaw transition from prototype to production rollout to 1k+ enterprise users.
- Chair Mary Jo White on NEAT: "These efforts and others have enhanced our ability to reach more registrants, and more effectively use our limited examination resources." [1]
- o Developed illustrative visualizations to easily spot suspicious trading.
- o Implemented <u>3NF</u> relational database schema in kdb+/q to link raw and reference data.
- o Designed and built a <u>B-tree</u> based time series component to visualize HFT data.
- Worked closely with quants and researchers to build effective tools.
- kdb+/q, python (pandas, numpy, flask), javascript (es6, react.js)

<u>Coffeetheapp</u> New York, NY

Lead Engineer Jan. 2015 - April 2015

- o Built professional networking webapp (LinkedIn clone) with desktop & mobile responsive design.
- Researched machine learning algorithms for recommending job candidates & professional matches.

Lab49 New York, NY

WebUI Consultant May 2014 - Dec. 2014

Developed enterprise (50k+ LOC) real estate management software (AngularJS v1).

KioosSão Paulo, BrazilSenior Software EngineerMay 2013 - Jan. 2014

• First hire. Built MVP in 3 months: an e-commerce + gamification solution for Magento (Amazon clone).

Advanced Simulation Technology, Inc.

Herndon, VA

Software Engineer June 2009 – April 2013

o Developed real-time audio and DSP components in C.

- o Built URC-200 (MIL radio) remote control system: realtime driver in C talking to a web UI.
- Built framework for automating VoIP clients at large scale (100+ clients), featuring: a distributed architecture (using the <u>Actor model</u>, via python-actors), and Zeroconf integration (via avahi).

JPMorgan Chase & Co.
Summer Technology Analyst
Summer 2008

• Programmed test scripts in Java and Python for trading software.

Projects / Code nl.q github.com/jlas/ml.q 2016 - Present

Machine Learning for kdb+/q

<u>Kaggle</u> kaggle.com/juanlasheras 2015 - Present

Applied Machine Learning competitions.

Sample Code github.com/jlas/sample-code 2013 - Present

o Small code samples: <u>Project Euler</u>, <u>HackerRank</u>, and more.

Quirky github.com/jlas/quirky 2012

 $\circ\;$ Open source clone of the Qwirkle board game. Made with node.js and jQuery.

Education Georgia Tech Atlanta, GA

M.Sc. Computer Science 2018 (Expected)

Carnegie Mellon University

B.Sc. Electrical and Computer Engineering, with Honors

May 2009

This document is available at http://www.juanl.org/resume.pdf

[1] https://www.sec.gov/news/testimony/white-testimony-sec-agenda-fy2018-budget-request.html