

# Timothy K. Paine

 [tim.paine.nyc](http://tim.paine.nyc)  [timkpaine](https://github.com/timkpaine)  [timothy.k.paine@gmail.com](mailto:timothy.k.paine@gmail.com)  NYC

## Experience

Dec 2021

|  
Nov 2020

### IEX

Head of Software Engineering - IEX Cloud

- Established engineering best practices on a rapid growth team
- Overhauled all aspects of the software development lifecycle
- Led feature development for the existing financial data delivery product
- Led the successful build out of a new product vertical, a DB/API-as-a-service

Nov 2020

|  
Mar 2016

### J.P. Morgan

Vice President - Athena Core

- Led development of a cloud research environment for ~1500 developers, quants, and traders
- Developed high performance applications for real time post trade analytics
- Overhauled core systems, components, and processes for development and integrations

Jan 2016

|  
Jul 2015

### MayStreet

Software Engineer

- Developed low latency market data and order entry systems for North American, European, and Asian equity and options exchanges
- Developed a market data analytics platform for analyzing market micro-structure

Present

|  
May 2015

### Columbia University

Associate in Computer Science (Faculty)

- Courses include language fundamentals (Python, C, C++), algorithms and data structures, computer systems, and software engineering

## Education

### Columbia University

B.A. Computer Science/Mathematics

B.S. Computer Engineering Magna Cum Laude

M.S. Computer Engineering

*All degrees completed concurrently*

## Projects

Established OSS organizations at IEX and J.P. Morgan, active contributor/maintainer of several large scale open source projects, most notably for the Jupyter and FINOS organizations

## Media

**Production Notebooks** | JupyterCon 2020 | [tim.paine.nyc/talks/jupytercon](http://tim.paine.nyc/talks/jupytercon)

**Beyond Spreadsheets** | NYC Data Council 2020 | [youtu.be/PYTVU4A\\_3Kc](https://youtu.be/PYTVU4A_3Kc)

**JPMorgan's requirement for new staff: coding lessons** | Financial Times

**JPMorgan's Python training guide for analytics and traders** | [efinancialcareers](http://efinancialcareers)

## Publications

### Q100: The Architecture and Design of a Database Processing Unit

~ L.Wu, A. Lottarini, T. Paine, M. Kim, K.Ross

*ASPLOS 2014: Nineteenth International Conference on Architecture Support for Programming Languages and Operating Systems. **IEEE Micro Top Pick.***