Timothy K. Paine

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Education

Columbia University in the City of New York — New York, NY
Fu Foundation School of Engineering and Applied Sciences
   M.S. in Computer Engineering — 2015
   B.S. in Computer Engineering, *Magna Cum Laude* — 2015
Columbia College
   B.A. in Computer Science/Mathematics — 2015

Sophia University — Tokyo, Japan — Summer 2011

Work Experience

IEX
Developer - IEX Cloud   November 2020 - Present
   Real time, high performance financial data and analytics

J.P. Morgan
Vice President - Athena Core   March 2016 - November 2020
   Develop real time, front office analytics platforms (**Python, C++, Java, Javascript**)
   Third Party Integrations (Jupyter, Zipline, Pyfolio, Theano, Tensorflow)
   Library build systems (Intel icc/ifort, mkl, VTune, gcc, ATLAS)

MayStreet
Software Engineer   July 2015 - January 2016
   Developed low latency market data and order entry systems for
      North American, European, and Asian exchanges (**C++, C#, Java**)
   Developed market data analytics platforms for analyzing market
      micro-structure via colo-captured pcap data (**Python, C++, and R**)

Columbia University
Adjunct Associate Professor   Summer 2015 - Present
   COMS4995 Open Source Development
   ENGI1006 Introduction to Computing for Scientists and Engineers (**Python**)
   COMS3101 Programming Languages - **Python, C++**
   COMS1005 Introduction to Computer Science and Programming in **Matlab**
   COMS3136 Essential Data Structures in **C** and **C++**
   CSEE3827 Fundamentals of Computer Systems

Credit Suisse
Equities/Quantitative Analyst – Tokyo, Japan   Summer 2014
   Data mining, predictive machine learning, and wavelet modeling (**R, Python**)

IBM
Software Group   Summer 2013
   Agile development of B2B application frameworks (**Python, javascript**)

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.**