Weston Jackson

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EDUCATION

Columbia University, New York, NY
B.A. in Computer Science, GPA: 3.99/4.00 — May 2017
M.S. in Computer Science, GPA: 4.00/4.00 — July 2019

Awards and Honors:
Graduated *summa cum laude* — May 2017
Awarded Computer Science Department cash prize for academic excellence — April 2017
Junior Phi Beta Kappa inductee — December 2016

TECHNICAL SKILLS

Languages: Python, Java, C, C++, Go, PHP, Scala, Javascript, HTML/CSS
Development Tools: Vim, Intellij, Sublime, Jupyter Notebook, PyCharm, Xcode, Eclipse
Data Technologies: Vertica, MySQL, Kafka, Docker, Kubernetes, Hadoop

EXPERIENCE

AppNexus — July 2017 – Present
Software Engineer
• Led development of budgeting, allocation, and valuation mechanisms for AppNexus's demand-side platform.
• Engineered solutions for post-click and post-view cost-per-acquisition (CPA) optimization.
• Wrote and scaled Python and Java streaming applications that optimize millions of dollars of daily ad spend.
• Improved and maintained the real-time programmatic advertising infrastructure written in C.

Department of Computer Science, Columbia University — January – May 2017
Teaching Assistant
• TA for Analysis of Algorithms I, an introduction to the design and analysis of efficient algorithms.
• Held office hours, helped students with homework via Piazza, graded assignments, and proctored exams.

AppNexus — May – August 2016
Software Engineering Intern
• Created a standalone Scala application that automated a time-consuming data recovery process.
• Improved the data platform's job scheduler by writing the API for ad hoc job processing.
• Integrated the application into the data platform's Python-Flask web framework using said ad hoc functionality.

PROJECTS

Approximate Near Neighbor Search under l-infinity — March - May 2019
• Final project on data structures for approximate near neighbor search in l-infinity normed spaces.
• Proposed two original data structures solving this problem that have good space/time bounds in low-dimensions.

Deep Learning for Network Traffic Classification — October - December 2018
• Research project that tests using deep learning to predict Server Name Identification (SNI) from HTTPS features.
• Compared Random Forest, Convolutional Neural Networks, Recurrent Neural Networks, and Ensemble Methods.

2-Way k-Means: A Model for Microbiome Samples — September 2016 - August 2017
• Clustering research with Professor Itsik Pe'er for the Human Microbiome Project.
• Paper presentation at KDD 2017 and published in the Journal of Healthcare Engineering, vol. 2017.

PUBLICATIONS

• Weston J. Jackson, Ipsita Agarwal, and Itsik Pe'er. "2-Way k-Means as a Model for Microbiome Samples." *Journal of Healthcare Engineering*, vol. 2017, Article ID 5284145, 7 pages, 2017. doi:10.1155/2017/5284145.

INTERESTS

• Basketball, Music, History