

## Dennis Wei

Phone: (775) 636-2511 | Email: [dw2654@columbia.edu](mailto:dw2654@columbia.edu) | GitHub: <https://github.com/dennis-wei>

Address: 2920 Broadway 5235 Lerner Hall, New York, New York 10027

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### EDUCATION

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#### COLUMBIA UNIVERSITY, COLUMBIA COLLEGE

August 2014 – May 2018

*Bachelor of Arts: Double Major in Computer Science and Economics-Mathematics*

3.7/4.0 GPA

- Relevant Coursework: Data Structures in Java, Statistical Machine Learning, Natural Language Processing, Analysis of Algorithms, Introduction to Databases, Advanced Database Systems, Advanced Programming in C/C++, Introduction to Modern Cryptography

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### EXPERIENCE

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#### BLOOMBERG L.P.

June 2017 – August 2017

*Software Infrastructure Intern*

- Contributed to Bloomberg's open source database Comdb2, a distributed relational database management system designed to be highly available while maintaining high performance
- Implemented incremental backups, drastically reducing both the creation time and disk space usage of backups. Adapted incremental backups to handle incredibly large databases with high throughput as well as distributed clusters
- Developed a robust test system for incremental backups designed to test correctness under high load and highly complex situations while maintaining recoverability through the ARIES recovery algorithm

#### WELCOME COMMERCE

May 2016 – August 2016

*Data Science/Software Engineering Intern*

- Worked with a data analytics team of four people within a 30-person startup to build algorithms using various Python libraries that perform statistical analyses on tens of thousands of customer service message logs
- Integrated machine learning and natural language processing algorithms to train and persist models in order to automate tasks that previously had required a dedicated customer success team hundreds of hours to perform

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### PROJECTS

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#### NEWS ARTICLE SIMILARITY ANALYZER

- Built a Flask web application that regularly scrapes politics articles from sources such as the New York Times and the Washington Post then finds similar articles across sources by utilizing machine learning clustering techniques
- Compares articles using a dynamic vocabulary system that adapts to current trends and stories to determine bias using sentiment analysis

#### DISTRIBUTED MACHINE LEARNING WITH CONCORD.IO

- Implemented machine learning algorithms in Python to be used in a real time data analytics engine
- Coded state-of-the-art online Bayesian statistical algorithms from the ground up and adapted these methods for cluster computing using Apache Mesos

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### LEADERSHIP

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#### COLUMBIA ORGANIZATION OF RISING ENTREPRENEURS (CORE)

*Treasurer, Codirector of Technology, Codirector of Intercollegiate Programs*

- Helped organize Ignite@CU, an entrepreneurship conference featuring panels, workshops, and networking events designed to empower and showcase student entrepreneurs from Columbia, Harvard, Yale, and other top universities
- Organized CORE Global Tech Treks, a program that brought groups of students to global entrepreneurship hubs, such as Silicon Valley, London, and Berlin, and exposed them to entrepreneurship in an international context through visits to startups, venture capital firms, and accelerators
- Utilized a variety of technologies to iterate on CORE's websites and a number of internal tools. Managed a team of designers and developers to build products according to specifications aligned with CORE events and initiatives

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### SKILLS

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**PROGRAMMING LANGUAGES:** Python, Java, C/C++, Elixir, HTML5/CSS, R, Rust, Julia, OCaml, Lisp

**TOOLS:** UNIX, Git, Flask, Phoenix, TCP/IP, PostgreSQL, Cassandra, Bootstrap, Materialize, jQuery, Docker