Brandon Chong

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Education

University of Illinois at Urbana-Champaign
Bachelor of Science in Computer Science   *August 2013 – May 2017*

Advanced Coursework:

Algorithms I and II	Distributed Systems	Programming Languages
Database Systems	Data Mining	Machine Learning
Numerical Methods	Security	Web Programming

Experience

Microsoft   Redmond, Washington
Software Engineer II   *June '17 – Present*

Enabled queries to be distributed seamlessly across many physical partitions
Enabled clients to read and write JSON documents in binary for faster reads, writes, and queries
Added support for seamless cross partition operations on the Compute Gateway
Automated query integration testing, which is now part of the weekly scrum and signoff requirements
Reworked the product's pagination story to allow for seamless scale up or down of cross partition operations
Added an end to end tracing story to reduce the time spent on high latency investigations

Microsoft   Redmond, Washington
Software Developer Intern   *May '16 – Aug '16*

Worked on DocumentDB: A distributed, cloud, and NoSQL database service
Developed a query engine testing framework that generates its own queries dynamically given a data set
Enabled developers to focus on query optimization and provided confidence to database users

Epic Systems Corporation   Madison, Wisconsin
Software Developer Intern   *May '15 – Aug '15*

Allowed doctors to run hypothesis tests to observe statistical differences between patient treatment groups
Extended Epic's HTML5 Canvas Graph API, which is used in many data visualizations applications
Fused statistics with data visualizations to provide critical information with a friendly UI/UX

NMSI, Inc.   Los Angeles, California
Software Developer Intern   *May '14 – Aug '14*

Maintained a loan origination system for a wholesale mortgage company
Optimized people's workflow through tooling leading to revenue growth
Maintained a MS-SQL database as well as a windows server host

University of Illinois at Urbana-Champaign   Urbana, Illinois
System Programming, Discrete Mathematics, and Intro to Programming TA   *Aug '14 – May '17*

Projects

Cheating Detector for Programming Courses   *Jan '15 – May '17*

Measures the similarity between all students for every assignment
Allows users to easily review/compare suspected matches and report them
Heavily utilizes variations of edit distance and logistic regressions

Automated Software Testing Infrastructure for Programming Courses   *Jan '15 – May '17*

Eliminates the need for assignment writers to develop their own testing scripts
Allows all courses to grade their assignments just by creating a configuration file and unit tests
Uses python for the infrastructure and the unit tests can be in the writer's preferred language
Designed to grade system programming code with concurrency, I/O, and networking

Last update on January 27, 2021

Please refer to my website for a more detailed explanation of my experiences and projects along with some live demos.

www.brandonchong.net