

# HUGH HAN

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## EDUCATION

**Johns Hopkins University**  
M.S.E., Computer Science, '18  
focus in machine learning

**Johns Hopkins University**  
B.S., Computer Science, '18  
minor in applied mathematics  
GPA: 3.74 / 4.00 (in-major)

## RELEVANT COURSEWORK

### GRADUATE

Theoretical Computer Science  
Machine Learning  
Natural Language Processing  
Artificial Intelligence  
Parallel Programming

### UNDERGRADUATE

Real Analysis  
Probability & Statistics  
Combinatorics & Graph Theory  
Operating Systems  
Computer Networks  
Compilers & Interpreters  
Web Development & Design

## SKILLS

### PROGRAMMING LANGUAGES

C/C++, Python, Java,  
JavaScript, Swift

### TOOLS & FRAMEWORKS

Flask, Django, React, XCode,  
Vim, Git, MATLAB, L<sup>A</sup>T<sub>E</sub>X

## HONORS & AWARDS

Feb '17 **2<sup>nd</sup> Place, Overall**  
*HopHacks*

Dec '16 **hackNY Fellow**  
*hackNY.org*

May '14 **Northrop Grumman  
Engineering Scholarship**  
*Northrop Grumman Corporation*

Mar '13 **USACO Silver Division**  
*USA Computing Olympiad*

## EXPERIENCE - INDUSTRY

**Microsoft** redmond, wa  
software engineer intern, *cloud + enterprise* fall '17  
· SQL Server: Azure DB for PostgreSQL.

**MongoDB** new york, ny  
software engineering intern, *distributed systems* summer '17  
· Asynchronized the automatic chunk-splitting operation for sharded collections.  
· Reduced duplicate work done and network calls made by **mongos** nodes.  
· Built non-deterministic concurrency test suites for MongoDB commands.

**Semester.ly** baltimore, md  
software engineer, *full stack* spring '17  
· Implemented new features for the Semester.ly web platform from the ground up.  
· Built an internal analytics dashboard for insights regarding Semester.ly usage.

**Bloomberg LP** new york, ny  
financial software developer intern, *internal systems* summer '16  
· Extended a backend customer support routing service for Bloomberg Analytics.  
· Implemented features for the **ADSK<GO>** terminal function from the ground up.

**Johns Hopkins Applied Physics Laboratory** laurel, md  
research analyst intern, *air & missile defense* summer '15  
· Increased the time performance of a weapon-tracking algorithm by over 10x.  
· Improved the statistical reliability of a radar simulator by over 1000x.  
· Built a self-optimizing Kalman filter & data visualization tool for threat data.

## EXPERIENCE - ACADEMIA

**Center for Language & Speech Processing** baltimore, md  
research assistant, *machine learning* spring '17  
· Working on machine learning research regarding Twitter location data.  
· Extending features for the open-source Carmen project.

**Johns Hopkins Department of Computer Science** baltimore, md  
teaching assistant fall '15, fall '16  
Aided in lecture, led review sessions, and graded coursework for:  
[ fall '15 ]: CS 226, Data Structures,  
[ fall '16 ]: CS 463, Analysis of Algorithms.

## PROJECTS

**Nexus** | [devpost.com/software/nexus](https://devpost.com/software/nexus) [ Spark, Kafka, NLTK, neo4j, Elasticsearch, Flask, Angular ]  
Nexus streams news articles in real time, tagging related entities in text. After constructing knowledge graphs, hidden insights regarding specific businessmen, politicians, etc. are made publically accessible through the Nexus API and client.

**DashTo** | [hughhan.me/dashto](https://hughhan.me/dashto) [ PostgreSQL, Django, Swift ]  
DashTo is a mobile platform that finds popular events happening in your neighborhood. It features event tagging, anonymous posting, and exclusive invites within particular networks.