David W. Yan

Contact:
david.yan@duke.edu

Education

Durham, NC **Duke University** **August 2014 – May 2018**

- B.S. in Computer Science, Expected 2018.
- Graduate Coursework: Parallel Programming; Graph Algorithms
- Undergraduate Coursework: Software Development and Design; Web Development; Design and Analysis of Algorithms; Operating Systems; Computer Architecture; Linear Algebra

Employment and Experience

Software Engineer, Intern **Evernote** **Summer 2017**

- Incoming Full Stack Software Engineering Intern with Evernote Commerce and Infrastructure Team, Summer 2017.

Software Engineer, Intern **Trading Technologies** **Summer 2016**

- Developed new Javascript based features to enable efficient web trading on the TT Web trading platform; Worked alongside full time engineers to resolve client-reported bugs.
- Created Slack integration service using Amazon Web Services SDK for NodeJS to instantly display live company analytics within a Slack channel. This feature is currently in daily use by over 300 members of the company.

Primary Researcher **Duke University** **Jan. 2016 – May 2016**

- Developed an iOS app in Swift to collect over 50 million minute by minute movement data points for Fitbit users.
- Developed Python architecture using Firebase API to collect, parse, and export user movement data results in CSV format for MATLAB rendering.
- Created prediction model for user mood levels based on locomotor movement and sleep data.

Co-Founder **Codestory** **Mar. 2016 – Present**

- Work as a frontend developer of a web based 3D environment that gives computer science students a visual representation of code execution.
- Developed client side rendering of 3D models using BabylonJS.
- Winner of $10,000 ChangeWorks Grant for achievements in promoting Social Good.

Teaching Assistant **Duke University** **Jan. 2015 – Dec. 2015**

- Undergraduate Teaching Assistant for Computer Science 101, Introduction to Computer Science.
- Led and taught a weekly programming review section to 30 students.

Projects and Skills

Notable Projects

- **MPI Timing Tool** (2017). MPI/C++ benchmarking routine for MPI_COMM_WORLD communication latency with MATLAB visualization. Measures data transmission latency between all machines within a specified computer cluster.
- **Parallel All Pairs Shortest Paths Algorithm** (2017). Developed and implemented a parallel version of the Floyd-Warshall all pairs shortest paths algorithm using Matlab and Cilk.

Languages and Technologies

- Java; Javascript; Python; Matlab; C/C++; NodeJS; AngularJS; HTML/CSS; SQL; MPI; Cilk