John J. Kim

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Education

Vanderbilt University (Nashville, TN)   **2015 – 2019 (expected)**
- Dual Major: Mathematics and Computer Science, School of Engineering
- Overall GPA: 3.53 / 4.00, Mathematics GPA: 3.74 / 4.00, CS GPA: 3.50 / 4.00
- Minor in Financial Economics, GPA: 4.00 / 4.00

Online Coursework   **Summer 2016**
- Stanford University, Coursera: Machine Learning
- MIT, EdX: Introduction to Computer Science and Programming Using Python

Work and Volunteer Experience

Vanderbilt Neuroscience Laboratory – Technical Research Assistant   **August 2016 – Present**
- Researching neural network learning algorithms to simulate human cognition by modeling the inferior temporal cortex.
- Using MATLAB to code functions and algorithms.
- Using UNIX to communicate with the Vanderbilt University ACCRE cluster.

Change Your VU – Financial Officer   **August 2016 – Present**
- Leading initiative to provide college counseling to local high school students from underprivileged backgrounds.

Vanderbilt Student Volunteers for Science – Team Leader   **August 2015 – Present**
- Presenting science concepts to local middle and elementary school students to pique interest in STEM fields.
- As a team leader, organizing lesson structure to ensure learning experience proceeds smoothly and effectively.

Vanderbilt University – Teaching Assistant   **January 2017 – Present**
- Analyzing and grading assignments and code submitted by students in Computer Organization. Holding office hours to address students' questions and concerns. Course taught in ARM Assembly.

Achievements

KICC National Champion   **February 2017**
- After winning the Vanderbilt University campus competition and the North Atlantic regional competition, presented and placed 1st in the national round of KPMG's International Case Competition. Representing Team USA in the international competition in April.

Independent Projects

Titanic Classifier – Designed learning algorithm based on a logistic classifier to predict whether a passenger survived, given passenger characteristics, including gender and fare. Used MATLAB.
Handwriting Recognition – Designed neural network classifier to read handwritten numbers. Used MATLAB.
Graphing Calculator – Designed calculator from scratch that graphs multivariable and parametric functions. Used C++.

Relevant Coursework

Nonlinear Optimization, Database Management Systems, Program Design and Data Structures, Ordinary Differential Equations, Discrete Structures, Computer Organization, Multivariable Calculus, Linear Algebra, Complex Variables, Financial Accounting, Strategic Analysis, Probability and Mathematical Statistics

Skills

Proficient: C++ │ Python │ ARM assembly
Familiar: Java │ MATLAB │ SQLite │ UNIX │ HTML │ CSS │ Bootstrap
Operating Systems: Windows, MacOS