

# Daniel H Kim

Dartmouth College HB 2335  
Hanover, NH 03755

Daniel.H.Kim.19@Dartmouth.Edu  
(603) 790-0656

## Education

---

**Thayer School of Engineering, Dartmouth College**, Hanover, NH Expected June 2020  
*Bachelor of Engineering in Computer Engineering, Minor in Philosophy. GPA 3.25/4.0*  
Relevant Coursework: Scientific Computing, Object-Oriented Programming, Software Design and Implementation,  
Database Systems, Digital Electronics, Discrete and Probabilistic Systems, Discrete Math in Computer Science, Machine Learning (enrolled)

## Academic Project Work

---

**Electric Piano** (team project) May 2018

- Built a polyphonic electric piano with a sustain pedal on a FPGA board, coded in VHDL.
- Optimized resource utilization and critical timing paths by conducting modular tests.

**Blog Database** December 2017

- Implemented the back-end of a personal blog using Java and MongoDB.
- Devised the logic to upload posts and comments, and delete one's post depending on the author.

**Code Scavenger Hunt** (team project) May 2017

- Employed ncurses to design a campus map displaying major buildings and the locations of each scavenger, updating every time a scavenger sent a message through their Pebble watch.
- Created custom data structures (hash table, set and counter-set) to hold game state data.
- Delivered functions to parse and handle messages sent from Pebble watches to the game server.

**Tiny Search Engine** Mar-April 2017

- Built a functional search engine comprised of three components: a web crawler, indexer and querier.
- Applied recursion to retrieve embedded URLs from a seed URL, limiting exploration to a given depth.
- Ordered search results based on relevance, with the optional operators "and" and "or".

**Six Degrees of Kevin Bacon** Oct 2016

- Determined a value "distance" that links two actors, based on mutual co-stars.
- Found the average distance of all actors in the database from a given actor using tree recursion.

## Work Experience

---

**Development Strategy Team**, School of Public Administration, Sungkyunkwan University June 2018-Aug 2018  
*Research Assistant*

- Compiled development strategies of the past 50 years in South Korea into a 130-page study.
- Evaluated the potential impact of policies in other countries by comparing political and economic indicators.

**Harvest Educational Consulting**, Seoul, South Korea Dec 2017-Mar 2018  
*Common App Consultant, SAT & AP lecturer*

- Introduced new curriculum for SAT Math, improving the average score of 30 students by 120 points.

**Lynd Lab**, Thayer School of Engineering, Dartmouth College Jan-May 2016  
*First-year research assistant*

- Identified genes that increase ethanol production in organisms for the consolidated bioprocessing of biomass to biofuels, using the CLC Sequencer Viewer program to construct and edit DNA sequences.

## Activities

---

**Chi Gamma Epsilon Fraternity** Jan 2018-Present  
*Risk and Compliance Officer*

- Coordinated campus-wide events for 300+ students, communicating with campus police, administration and the programming board to ensure the safety of everyone involved.

**The Dartmouth**, campus newspaper Sept 2015-May 2017  
*Staff writer, news editor, layout artist*

- Published weekly news stories in print and digital form, reaching an audience of 19.1k on Twitter and 10k on Facebook.
- Designed layouts combining text and graphic elements using InDesign and Photoshop.

## Skills, Language, Interests

---

Java, C, Matlab (Proficient), MySQL (Prior experience), HTML, CSS, JavaScript (Beginner)  
Adobe Photoshop, InDesign, Illustrator  
Native fluency in Korean  
Lo-fi hip-hop beat making, Heideggerian philosophy