Seunghyun Kim

Georgia Institute of Technology
skim888@gatech.edu | (607) 220-9468

EDUCATION

Georgia Institute of Technology, College of Computing — **Aug 2019 – May 2024 (Expected)**
Ph.D. Student in Computer Science — Atlanta, GA

Cornell University, College of Engineering — **Aug 2017 – May 2019**
Master of Science in Computer Science — Ithaca, NY
Cumulative GPA: 3.882

Cornell University, College of Engineering — **Jan 2013 – Jan 2014**
Master of Engineering in Computer Science — Ithaca, NY
Cumulative GPA: 3.446

Cornell University, College of Arts and Sciences — **Aug 2009 – Jan 2013**
Bachelor of Arts in Computer Science — Ithaca, NY
Cumulative GPA: 3.154

Related Coursework: Social Computing, Natural Language Processing, Computation Techniques for Analyzing Clinical Data, Artificial Intelligence, Information Retrieval, Probabilistic Models and Inference

PUBLICATIONS

Kim, S., Razi, A., Stringhini, G., Wisniewski, P., and De Choudhury, M. (2021). *You Don't Know How I Feel: Insider-Outsider Perspective Gaps in Cyberbullying Risk Detection.* In Proceedings of the International AAAI Conference on Web and Social Media (Vol. 15, pp. 290-302).

Kim, S., Razi, A., Stringhini, G., Wisniewski, P., and De Choudhury, M. (2021). *A Human-Centered Systematic Literature Review of Cyberbullying Detection Algorithms.* Proc. ACM Hum.-Comput. Interact. 5, CSCW2, Article 325 (October 2021), 34 pages.

A. Razi, **S. Kim**, A. Alsoubai, G. Stringhini, T. Solorio, M. De Choudhury, P. Wisniewski, M. De, *A Human-Centered Systematic Literature Review of the Computational Approaches for Online Sexual Risk Detection*. Proc. ACM Hum.-Comput. Interact. 5, CSCW2, Article 465 (October 2021), 38 pages.

RESEARCH EXPERIENCE

A Multi-Disciplinary Approach to Detecting Adolescent Online Risks — **Aug 2019 – Present**
National Science Foundation Funded Project — Atlanta, GA

- Examined the past literature on cyberbullying detection through the lens of human-centeredness to identify gaps in incorporating the human and social aspects of technical solutions; illustrated the benefit of involving the human in machine learning algorithm designs
- Studied how various stakeholders of cyberbullying perceive cyberbullying differently, effecting the performance of detection models; highlighted the importance of self-initiated annotations from cyberbullying victims in developing a robust cyberbullying detection system

2018 National Natural Language Processing Clinical Challenge (N2C2) **May 2018**
Joint Project Ithaca, NY

- Examined the potential of Convolutional Neural Networks (CNN) when analyzing clinical records without any medical knowledge supervision; demonstrated the effectiveness of CNN in text classification while illustrating the need for medical knowledge in training the models for analyzing clinical data
- Implemented the CNN structure for text classification and participated in the data preprocessing phase

10th Annual Sociology Research Symposium **Mar 2018**
Joint Project Ithaca, NY

- Discovered null correlation between the amount of social feedback and the length, visual word, and the percentage of adjectives and adverbs in posts, which showed that people in online communities are supportive of anyone who writes suicidal posts on a suicide prevention community on Reddit regardless of the length or vividity of the post
- Found positive correlation between the amount of social feedback and negative factors which demonstrated how people were willing to help those that showed critical signs of suicidal intent
- Found no correlation between the amount of social feedback and protective factors which demonstrated how people were still caring despite fewer signs of suicidal intent
- Proposed the project; extracted and preprocessed Reddit posts and comments; developed the code for analyzing the correlation between the posts and number of comments and upvotes

Master of Engineering Project **Jan 2013 – Dec 2013**
Graduation Project Ithaca, NY

- Designed a model that analyzed electroencephalogram (EEG) data to detect hierarchies between brain cells
- Demonstrated the existence of hierarchical relationship between brain cells through pairwise analysis of the frequency of EEG signals

WORK EXPERIENCE

Nokia Bell Labs **Jun 2020 – Aug 2020**
Research Intern Cambridge, England

- Studied the concept of positive stress and its influences in the organizational cultures through Glassdoor using linguistic, location, and temporal analysis

Cornell University **Jan 2012 – May 2019**
Teaching Assistant Ithaca, NY

- Led weekly office hours and discussion sections; assisted in grading preliminary exams and assignments as a Head Teaching Assistant for *Introduction to Computer Using Python* (Aug 2017 – May 2019)
- Served as a Teaching Assistant for *Intermediate Design and Programming for the Web* (Jan 2012 – May 2012) and for *Introduction to Computing Using Python* (Jan 2013 – Dec 2013)

Cornell University **June 2018 – Aug 2018**
Instructor Ithaca, NY

- Organized 6-week summer course *Fundamental Programming Concepts*
- Prepared lecture material, assignments, and exams
- Held weekly office hours and utilized an online Q&A board to maximize each student's learning experience

Unichal, Inc. **June 2014 – June 2017**
Associate Research Engineer Seoul, South Korea

- Coordinated a project for a speech recognition platform utilizing various speech recognition API to help South Korean tourists overseas
- Developed an Android application that used an external camera device and Optical Character Recognition to search word definitions from paper text

Uijeongbu St. Mary's Hospital **June 2010 – June 2011**
Software Developer Uijeongbu, South Korea

- Developed a software that parsed the physician input and exported into the hospital database format
- Built a software that suggested differential lists from lab test results to improve diagnostic accuracy of resident physicians during their training

HONORS AND AWARDS

Yahoo! Teaching Award **May 2013**
Cornell University Ithaca, NY

- Recognized as one of 2 outstanding teaching assistants in the College of Engineering

SKILLS AND INTERESTS

Programming Skills: Java / Python / MySQL / HTML / JavaScript / PHP / CSS / Linux
Web Development: Building websites / Renewing designs of old websites / Managing website database systems
Interests: Breakdancing and popping / Cooking / Playing chess