Sujin Han

Email: sujinhan@kaist.ac.kr
Mobile: +82-10-9215-2428
Github: github.com/vilotgit
Country of Residence: Republic of Korea

Education

- **Korea Advanced Institute of Science and Technology** — Daejeon, Korea
  Master of Science - Electrical Engineering — *Feb 2022 -*
  Advisor: *Professor Sung-Ju Lee*
  Courses: *Advanced Computer Networking and Cloud Computing, Software Security*

- **Korea Advanced Institute of Science and Technology** — Daejeon, Korea
  Bachelor of Engineering - Computer Sciences; Minor in Intellectual Property — *Aug 2017 - Feb 2022*
  Major GPA 3.94/4.3, Total GPA 3.78/4.3, Cum Laude
  Courses: *Computer Networking, Operating Systems, Computer Architecture, AI/ML, NLP, Programming Language, Compiler Design, Concurrent Programming, Algorithms, Data Structures*

Experience

- **Networking and Mobile Systems Laboratory (NMSL)** — Daejeon, Korea
  Undergraduate Research Intern — *Aug 2020 - Dec 2021*
  - **Topic**: Mobile Computing, Mobile Systems
  - **Project**: Contributed to a project that avoids Android compatibility crashes with micro-virtualization

- **Natural Language Processing and Computational Linguistics Lab (NLPCL)** — Daejeon, Korea
  Individual Research — *Dec 2018 - Feb 2019*
  - **Topic**: Natural Language Processing, Sentiment Analysis
  - **Project**: Compared Support Vector Machine and Näive Bayes model for identifying sentiment in movie review data

Projects

- **Avoiding Android Compatibility Crashes with Micro-Virtualization (Mobile OS, Android)**: Compatibility mode app execution as solution to Android fragmentation problem. Read and modified Android source code for implementation. One of the authors. Paper submitted to MobiCom 2022 for review. (Aug 20 - Dec 21)
- **KENSv3 Projects (Computer Networking)**: Completed KAIST Education Network System projects (simulated TCP layer implementation) in a team of 2. Project description: https://github.com/ANLAB-KAIST/KENSv3 (Mar 21 - July 21)
- **Introduction to Artificial Intelligence Term Project – KAISD (AI, Speech Recognition)**: Developed a CNN model that can detect whether a person is sober or intoxicated given her speech data in a team of 3.
  Github: https://github.com/vilotgit/kaisd (Aug 20 - Dec 20)
- **Introduction to Social Computing Term Project – PitchPerfect (Social Computing, Web)**: Developed a web app to support remote collaboration amongst amatuer musicians in a team of 4. Core functionalities included: personal profile page, communication tools designed for musical collaboration (shared annotatable sheet music, commenting threads that can be pinned to shared sheet music, music term dictionary).
  Github: https://github.com/SangHyeon-Lee/PitchPerfect (Aug 20 - Dec 20)
- **Pintos Projects (Operating Systems)**: Completed pintos-kaist projects (simulated OS development on x86-64 architecture) in a team of 2. Project description https://casys-kaist.github.io/pintos-kaist/ (Mar 20 - July 20)
- **KAIST Puple Online Labyrinth (Web)**: Developed the front end of an online labyrinth website.
  Link: https://kaistpuple.com/present/main.php (Dec 19 - Feb 20)
- **Compiler Design Term Project (Compiler Design)**: Developed a compiler that can compile basic C code in a team of 5. Used lex, yacc, C++, and git to build the compiler. (Aug 19 - Dec 19)
- **Machine Learning and Natural Language Processing Term Project (AI, NLP)**: Modified "Enriching Word Vectors with Subword Information" (ACL 2017) in a team of 3. Produced two sets of subword vectors using fastText with two different sets of corpora. Compared the performance of two sets of subword vectors. (Aug 19 - Dec 19)
- **Immersion Camp: Intensive Programming and Startup (Android, Web, Unity)**: Developed different projects for 5 weeks. Ex. an Android app that recognizes handwritten numbers and helps kids practice basic arithmetic skills, an online platform for learning and coding in Scala, a set of mini games running on Unity engine. (June 18 - Aug 18)

Honors and Awards

- Dean's List in College of Engineering - Fall 2020

Skills Summary

- **Languages**: Python, Java, Kotlin, C/C++, Rust, F#, Scala, CSS, HTML
- **Platforms**: Linux, Android, Web