

## SEOYOUNG KWEON

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- Education:** **Columbia University in the City of New York**, New York, NY  
Majoring in Computer Science (Bachelor of Science), Projected May 2023  
Cumulative G.P.A. 3.82 / 4.0
- The Cooper Union for the Advancement of Science and Art**, New York, NY  
Electrical Engineering Comp.E Track, Attended Fall 2019 - Spring 2020  
Completed 35.5 credits, Cumulative G.P.A. 3.7 / 4.0
- Paper Submitted:** Lin Ai, Yu-Wen Chen, Seoyoung Kweon, Yuwen Yu, Julia Hirschberg and Sarah Ita Levitan (2022).  
*What Makes a Video Radicalizing? Identifying Sources of Influence in QAnon Videos*. EACL 2023
- Experience:** **SPOKEN LANGUAGE LAB**, Columbia, New York. January 2022-Current  
Multimodal Research on Radicalization, Research Assistant
- Extracted facial emotion features from videos and studied patterns in radicalizing and deradicalizing content
  - Extracted transcripts from the video data set and ran textual sentiment analysis
  - Studied metadata of video likes and views to categorize popularity to find what features make the video likable
  - Studied the correlation between the pattern in metadata (increase in video uploads or increase in comments) and the real-life events
  - Submitted a paper to EACL 2023
- CLOUZEN**, Gyeonggi Hwaseong-si, South Korea. May-September 2021  
Summer Internship, Application Development
- Programmed a full prototype application that can parse and handle data for user interaction.
  - Designed frontend and backend of an app to provide intuitive UI and efficient data processing
  - Fixed existing server-side program to handle invalid requests with appropriate responses
  - Designed and created webpages to display the server-side responses.
  - Documented the programmed work to share with other coworkers
  - Held a weekly presentation to report on the progress of the assignment for feedback.
- Project Work:** **OS PROJECTS**, Linux Operating System Fall 2021  
<https://gist.github.com/amykweon/03a87af0c8e983848419999b8929feeb>
- Multiple projects related to understanding and changing core Linux operating system.
  - Implemented lock mechanism in custom system calls to enable multiple concurrent processes.
  - Implemented several modules to add system calls that show understanding on the concept of task\_struct, virtual address translation.
  - Created simplified scheduler and file system and replaced existing ones.
- SALE COUPON COLLECTION**, Database System Fall 2021  
<https://gitfront.io/r/amykweon/93171470f2f51371f79f66990e86051d4b028e72/4111-dbProj/>
- Designed an ER diagram and schema based on a creative and complex real-life proposal.
  - Implemented the ER diagram in PostgreSQL database server with realistic data.
  - Created a web-front end application with python3 SQLAlchemy for user interactions such as queries or add/deletion of data.
- TCP CONNECTION**, Computer Network Fall 2021  
[https://github.com/amykweon/TCP\\_Connection.git](https://github.com/amykweon/TCP_Connection.git)
- Learned detailed components of TCP connection that ensure reliability and security.
  - Created python program that implements simplified TCP on top of a raw socket.
  - Tested and proven robust against dropped packet, out-of-order packet, and byte error.
- CAESAR CIPHER ENCODER**, Digital Logic Design Fall 2019
- With CMOS and TTL chips, created a Caesar cipher encoder, which can process a series of eight input alphabets and select the range of shift.
  - Designed the main logic of the Caesar cipher, and storage/separation of data on each display.
  - Created the entire circuit schematics with Eagle.
- Courses:**
- Operating Systems I; Computer Networks; Programming Language & Translator
  - Artificial Intelligence; Machine Learning; Natural Language Processing
  - Intro to Cryptography; Security I; Database System Implementations

- Skills:**
- **Computer Languages:** C, Java, Python, JavaScript, PostgreSQL
  - **Computer Programs:** AutoCAD, SolidWorks, Eagle, Adobe Illustrator, Adobe Photoshop, Microsoft Office, Processing, Arduino
  - **Laboratory Equipment:** Oscilloscope, Multimeter
  - **Languages:** Fluent in English and Korean
- Honors:**
- Columbia University, Dean's List, 2020-2022
  - The Cooper Union, Half-Tuition scholarship, 2019-2020
- Membership:**
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| • Member of Society of Women Engineers (SWE)   | 2019 - 2022 |
| • Electronics Member of FSAE                   | 2019 - 2021 |
| • President, Korean Animal Service Association | 2015 - 2019 |