# **Soyoung Yoon**

University Address) 291 Daehak-ro, Yuseong-gu, Daejeon 34141, Republic of Korea Home Address) 448 Expo-ro 402-702, Yuseong-gu, Daejeon 34141, Republic of Korea +82(42)-350-2114 (school) | +82(10)-2873-7290 (me) | lovelife@kaist.ac.kr

#### **EDUCATION**

### University

Korea Advanced Institute of Science and Technology (KAIST), Daejeon, South Korea

**Bachleor of Computer Science** 

feb 2016 – feb 2021(expected)

## Major-related taken course

Discrete Mathematics, Data Structure, Programming Principles, System Programming, Introduction to Linear Algebra, Computer Organization, Introduction to Algorithms, Operating Systems and Lab, Introduction to Computer Vision, Special Topics in Computer Science<Introduction to Research>, Programming Languages

#### Other taken courses

General Physics I/II, General Physics Lab. I, General Biology, General Chemistry I/II, General Chemistry Experiment I, Calculus I/II, Introduction to Programming, Introduction to Operations Research, Understanding Music and the Brain, Logical Writing, Cell Biology, Understanding Music & Music History

### **GPA**

Total: 3.83/4.5, Major only: 4.03/4.5

### **Research Interest**

Natural Language Processing, Machine Learning, Social Computing, Software Engineering

### **SKILLS**

### **Language Skills**

TOEIC(by ETS), 980

feb 2018

**TOEFL, 108** 

nov 2018

## **Programming language Skills**

Python, Matlab, Scala, C, JavaScript(Vue.js)

### MAJOR PROJECTS

### **Pintos(KAIST Course Projects)**

spring 2018

Pintos is an instructional operating system framework created at Stanford University by Ben Pfaff. I went through Pintos projects for the Operating System course in spring 2018.

# **KAIST Programming Camp**

summer 2018

I participated at KAIST 5-week Intensive Programming Camp (madcamp) at summer 2018.

Site: http://www.madcamp.io/

I conducted 5 projects per week, mainly focusing on mobile app development, web programming based on Flask, Gan-based machine learning projects using TensorFlow.

### **Software Engineer Intern, AITRICS**

Jan 2019 ~ Aug 2019

AITRICS is a global startup that provides data-driven healthcare solution. I worked on AITRICS as a front-end and back-end server engineer, counducting hundreds of data per minute, using Django-Rest Framework and Vue.js.

Major contributions:

- -Profiled he speed of services by using Django-silk and Django-debug-toolbar, and in order to make services faster, Optimized sql queries for big amounts of input data using Django ORM.
- -Implemented functions (Giving alarms at appropriate time, Calculating individual patient's medical score using celery and celery-beat and etc) needed for the VitalCare product dashboard UI according to consumer's demand
  - -Made current products service well with newly made machine learning models
- -Applied RNN models to the inference server and computed cosine similarity of real-word data and trained data distributions
  - -Made test functions using pytest and python hypothesis
- -Implemented dashboard UI by Vue.js (front-end)
- -Mainly implemented patient's vital sign graph by using echarts (front-end)
  - -was in charge of the front-end and back-end part of the VitalCare product

Site: https://www.aitrics.com/

#### More

For more information on my projects, please reference my github address.

Address: https://github.com/soyoung97

### ACCOMPLISHMENTS

# Made a conference presentation talk at PyCon Korea 2019, August 2019

title: Django query optimization for medical AI data processing

about my session: pycon.kr/program/talk-detail?id=42

Pycon slides: https://www.slideshare.net/SoyoungYoon11/pycon-presentation-final

YouTube presentation link: https://www.youtube.com/watch?v=HpMYWk566OA

### Received National Graduate Science & Technology Scholarship, 2018

National Graduate Science & Technology Scholarship gives about \$500 dollars for one semester and your GPA for the previous semester must be 98 percent or higher to continue receiving this.

## Accomplished to the finals at Power of xx, 2018 http://www.powerofcommunity.net/

Power of xx is the only one hacking contest for women, and it is one of the event in POC(hacking/security conference).

I participated as one of the members of Power of xx team.

# Conducting mock hacking outsourcing for Hunesion products since 2018

Hunesion is a specialized provider of security solutions. I found two important vulnerabilities in their secure software and provided them with solutions. I cannot write further because of security issues.

# Accomplished to the finals at Power of xx, 2017

### EXTRACURRICULAR ACTIVITIES&EXPERIENCES

### Individual study at KAIST U&I lab since fall 2019 -

https://uilab.kaist.ac.kr/

advisor: Sungjoon Park https://sungjoonpark.github.io/

# Became a member of CONNECT Translating Supporters, 2018

CONNECT Translating Supporters translates English online programming & algorithm video lectures into Korean subtitles.

#### Freshmen Guidance Group(Proctor), 2018

Procter helps a class of 31 freshmen students adapt well with academic work and campus life as a class leader.

### Participated as an instructor on Samsung Dreamclass camp, winter 2017

Samsung Dreamclass camp is a 3-week camp where instructors teach middle-school students about Math, English, and guides their living.

### KAIST Buddy Program, 2017

Buddy helps international exchange students adapt well with KAIST school work and Korean life.

# Joined the KAIST GoN team since 2017

GoN is a KAIST hacking & security club that study hacking and participate in CTF.

### Joined KAIST pop band Carpe Diem as a female vocalist since 2016

### Participated at Education Program for Gifted Youth (EPGY), summer 2010

EPGY is a summer program that gives pre-collegiate studies at Stanford University. I participated at the Computer Science Subjects.

Reference: https://summerinstitutes.spcs.stanford.edu/

Lived at Palo Alto, California , summer 2009 – summer 2010
I went to Terman middle school for one year at California.