SANGJUN SON

RESEARCH INTERESTS

Tensor Analysis, Machine Learning, Data Mining,

EDUCATION

Seoul National University, Seoul, Republic of Korea Candidate for *B.S* in Computer Science and Engineering Interdisciplinary Major in Entrepreneurship

Daegu Science High School, Daegu, Republic of Korea

Mar. 2013 - Feb. 2016

Mar. 2016 - Present

PUBLICATIONS

Dawon Ahn, **Sangjun Son**, and U Kang, "Gtensor: Fast and Accurate Tensor Analysis System using GPUs", 29th ACM International Conference on Information and Knowledge Management (CIKM) 2020, Virtual Event, Ireland

RESEARCH EXPERIENCES

Data Mining Laboratory, Seoul National University

 $Research\ Internship\ (Advisor:\ Prof.\ U\ Kang)$

o Gtensor, BIGtensor: Accelerated large-scale tensor analysis on heterogenous system

o DAO-CP: Enhanced accuracy for CP decomposition of time-evolving tensors by a data-adaptive algorithm

 ${\bf Real\text{-}Time\ Ubiquitous\ Systems\ Laboratory},\ Seoul\ National\ University$

Jul. 2017 - Feb. 2018

Nov. 2019 - Present

Research Internship (Advisor: Prof. Chang-Gun Lee)

 \circ Implement simulation to study effects of AED delivery using unmaned vehicle transport technology on defibrillation in out-of-hospital cardiac arrest

TEACHING EXPERIENCES

International Students Integrated Peer Tutoring Program, Undergraduate student tutor Data Structures & Algorithm Basic Concepts, SNU Gwanak Residence Halls	Spring. 2021
Digital Computer Concept and Practice, Lab class lecturer Introduction to Python and Its Application, Dept. of Computer Science and Engineering	Fall. 2020
Basic Computing: First Adventures in Computing, Teaching assistant <i>Python Basics</i> , SNU Faculty of Liberal Education	Fall. 2020
Basic Calculus 1, Undergraduate student tutor	Spring. 2020
SOFTWARE	
BIGtensor , Contributor of BIGtensor-GPU and BIGtensor-Hadoop Tensor mining packages for large-scale tensor analysis	2019 - 2021

Drone Transfer Simulator

2017 - 2018

Simulation of AED drone delivery to defibrillation for patients with OHCA

COURSE PROJECTS

Deep learning-based wrinkle detection, Morpheus3D

Fall. 2020

Built new models to segment wrinkle parts in 3D scanned face images by exploiting state-of-art methods

ABC, Art with Block-Chain: media-art platform

Spring. 2020

Designed a platform where any creator can upload their own media arts and increase profits

Implemented smart contract on ERC-721 token, which records its metadata and p5.js-based content on blockchain

BusyWrite, Team writing solution to accelerate collaboration

Fall. 2017

Implemented a concept of a unit of thought that users write on, called *Bubble*, and enabled users to write simultaneously and merge after resolving conflicts.

SKILLS

Programming Languages Frameworks C++, Python, Java, MATLAB, Scala, Solidity (Welcome to any languages)

PyTorch, Tensorflow, React, AngularJS, Django

OpenCL, OpenGL, Hadoop, MFC

HONORS and **AWARDS**

Merit-based Scholarship (full amount), Seoul National University	Fall. 2020 - Spring. 2021
SNU Development Fund Scholarship, Seoul National University	2017
Korea Olympiad in Informatics, National programming contest for high school stu	udents 2015
Won a silver medal (3rd place)	

EXTRA-CURRICULAR ACTIVITIES

Decipher, Blockchain Research Group in Seoul National University Attended weekly seminars about various blockchain topics as a member of StuDeFi Designed a donation platform, AID-U for contributing student education expenses	Mar. 2020 - Aug. 2020
Paik's Beer Served beer and snacks as a part-time job	Dec. 2019 - Mar. 2020
Republic of Korea Army, Obligatory Military Service Discharged on full-term military service	Feb. 2018 - Oct. 2019

KASTTC, Table Tennis Club

Dec. 2016 - Dec. 2017

Conducted lessons to improve the skills of members, managed participating competitions, and supervised weekly training as a club's trainer.