CHE YEOL (JAYEOL) CHUN

415 South St. MS 018, Waltham, MA 02454

EDUCATION

Brandeis University

Waltham, MA

Ph.D. Computer Science Michtom Fellowship May 2024

Emory University

Atlanta, GA

B.S. Mathematics and Computer Science & Physics, summa cum laude

May 2018

Emory Merit Scholarship | Sigma Pi Sigma Honor Society | 100 Senior Honorary Class of 2018

TECHNICAL STRENGTHS

Programming Languages
Tools & Frameworks

Python, Java, C/C++, MATLAB, R, JavaScript

Tensorflow, MxNet, CoreNLP, NLP4J, Scikit-Learn, Docker, Git

RESEARCH EXPERIENCE

Brandeis University

Atlanta, GA

Research Assistant

Aug 2018 - Present

· Focuses on improving performance of AMR parsing and on down-stream applications using AMR graphs

Emory NLP Research Group, Emory University

Atlanta, GA

Undergraduate Researcher

Jun 2016 - May 2018

· Compiled three dependency treebanks in Korean (*LREC'18*)

Weissman Evolutionary Theory Research Group, Emory University

Atlanta, GA

Atlanta, GA

Undergraduate Researcher

Aug 2015 - May 2018

· Analyzed tree properties of Kingman and Bolthausen-Sznitman coalescent models

Astro-Particle Physics Research Group, Georgia Institute of Technology

May 2015 - Aug 2015

· Assisted in developing C++ data acquisition/analysis program that measures the photon detection efficiency of detectors used in telescopes

PROFESSIONAL EXPERIENCE

Student Research Project Leader

DEARGEN Inc.

Daejeon, South Korea

Intern, Data Scientist

May 2018 - Aug 2018

· Implemented WGAN-GP variant to produce synthetic gene expression data to augment TCGA

CAIDE Systems

Lowell, MA

Intern, Deep Learning Researcher

May 2017 - Aug 2017

· Implemented BEGAN variant to produce synthetic CT data to augment limited dataset

PUBLICATIONS

Building Universal Dependency Treebanks in Korean

Miyazaki, Japan May 2018

Chun, Jayeol; Han, Na-Rae; Hwang, Jena D.; Choi, Jinho D.

· In Proceedings of the 11th International Conference on Language Resources and Evaluation, of LREC'18

Dependency Analysis of Abstract Universal Structures in Korean and English Atlanta, GA Chun, Jayeol Apr 2018

· Honors thesis in the Department of Mathematics and Computer Science at Emory University

RELEVANT COURSES

Computer Science Math & Physics

Natural Language Processing Probability and Statistics I & II

Artificial Intelligence Ordinary & Partial Differential Equations

Data Structures and Algorithms Math Methods for Scientists and Engineers

Systems Programming Calculus & Linear Algebra

Theory of Computing
Discrete Structures
Numerical Analysis
Digital Electronics

Computer Organization & Assembly Programming Computational Modeling

Database Systems Classical Mechanics

LEADERSHIP AND COMMUNITY ENGAGEMENT

Emory Data Science Club, Emory University

Atlanta, GA Aug 2016 - Present

Senior Advisor

Aug 2016 - Present

Created and coordinated new program 'Emory Data 501' bench-marked from Data Science for Social

- Good (DSSG) aiming to provide platform for students to utilize technical skills to support non-profit organizations and execute campus-wide initiatives
- · Initiated partnerships with Office of Residence Life at Emory and CPACS as part of Emory Data 501
- · Participated in 'Python for Data Science Workshop' as technical assistant

Korean Scientists and Engineers Association, Emory University Co-founder & Co-president

Atlanta, GA

Jan 2016 - May 2017

- · Established national organization's chapter chartered by Emory to endorse STEM research and professional networking
- · Director of 'EmoryKDev', a subsidiary group of aspiring software engineers and data scientists, having initiated projects ranging from Django-based web-development for peer student organization to replicating auto-swiper bot in Tinder using convolutional neural network
- · Gave a talk 'Intro to Tech' at a peer student-led business organization on seeking employment opportunities in tech industry

Office of Residence Life, Emory University

Atlanta, GA

Residential Advisor

Aug 2016 - May 2017

- · Served as peer mentor on issues ranging from roommate conflicts and identity crises to career counseling and research involvement
- · Planed and facilitated programs with special emphasis on student success and social justice: the role of Asian community in Black Lives Matter movement, meditation sessions and big data as a main driving force behind social justice movements

TEACHING EXPERIENCE

Department of Computer Science, Brandeis University

TA, COSI-134: Statistical Approaches to Natural Language Processing

Waltham, MA 2018 - 2019

Institute of Liberal Arts, Emory University

Atlanta, GA

Undergraduate Instructor, IDS-490R: Supervised Reading and Study: Ethics/Epigenetics

Fall 2016

· One of three undergraduate instructors in charge of coordinating one-credit discussion-based side-car course on the intersection of science and religion

Department of Mathematics and Computer Science, Emory University Atlanta, GA

TA, CS-170: Introduction to Computer Science Spring 2016 - Fall 2016

MILITARY EXPERIENCE

Faculty Board, Republic of Korea Air Force Academy

Cheong-Ju, South Korea Jun 2011 - Jun 2013

English Communication Teaching Assistant

- · Prepared class materials and guided debates in English communications class for cadets
- · Presided over the squadron as the leader airman of Faculty Board, in charge of all administrative as well as military affairs for over a month
- · Taught an introductory English communication class for airmen on campus
- · Designed and operated English speaking class at local elementary school
- · Honorably discharged as staff sergeant

EXTRA-CIRRUCULAR

Emory Mascot Lord Dooley's Personal Guard (2016 - 2017)

Pledge Trainer Assistant, Alpha Phi Omega at Emory University (2015 - 2016)

Academic Fellow, Emory University. Mentor for incoming international freshmen (2015 - 2016)

Financial Head, Emory Astronomy Club (2015 - 2016)

Ad-Hoc Center for Diversity and Inclusion Advisory Council, Emory University (2015)

Chinese Calligraphy Club, Emory University (2014)

Seoul City 'One Less Nuclear Plant' Online Ambassador (2013 - 2014)

'Eco-Friendly Green Movement' Online Ambassador (2013 - 2014)

Habitat ReStore Volunteer, Habitat for Humanity Greater Vancouver, CA (2013)

Volunteer Photographer, FUN (Friends Uniting for Nature) Society, Vancouver, CA (2013)

Volunteer Photographer, Places-des-Arts, Vancouver, CA (2013)

ADDITIONAL SKILLS AND INTERESTS

Languages Korean (Native), English (Fluent)

Fine Arts Photography, Acoustic Guitar, Vector Graphics Design

Interests Basketball, Meditation, Reading, Soccer