Min Namgung

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https://minnamgung.github.io/

INTEREST	**Spatial Artificial Intelligence, Representation Learning, Deep Learning, Data Mining**

EDUCATION

University of Minnesota – Twin Cities — Minneapolis, MN
Ph.D. student in Computer Science&Engineering (**GPA 4.0/ 4.0**) — August 2021 – Present
CS Grad Coordinator in Women and BIPOC in CS&E — August 2022 – Present

Purdue University Fort Wayne — Fort Wayne, IN
Master of Science in Computer Science (**GPA 4.0/ 4.0**) — December 2020
- Master's Thesis: Performance Comparison of Public Bike Demand Predictions: The Impact of Weather and Air Pollution

Purdue University Fort Wayne — Fort Wayne, IN
Bachelor of Science in Computer Science — May 2019

PUBLICATION

Min Namgung, Yao-Yi Chiang (GeoAI 2022) Incorporating Spatial Context for Post-OCR in Map Images

(Submitted) Min Nagung, Theresa Chen, Yao-Yi Chiang (UCGIS 2023) Representation Learning of Regions using Unevenly Distributed, Incomplete Multi-Modal Data

POSTER & PRESENTATION

(Accepted) Min Nagung, Yao-Yi Chiang (AAG 2023) Preserving 2-Dimensional Spatial Relation for Map Text in Post-OCR Processing

Jina Kim(*), **Min Namgung(*)**, Johannes Uhl, Keith Burghardt, Yao-Yi Chiang, Stefan Leyk, Kristina Lerman (SaptialHumanities 2022) Identifying Street Name Evolution in Semantic, Temporal, and Geographic Spaces (* denotes equal contribution)

Min Nagung (UCGIS 2022) Incorporating Prior Knowledge To Forecast Fine-Grained Cloud-Top Temperature

RESEARCH EXPERIENCE

University of Minnesota
Knowledge Computing Lab — August 2021 – Present
Advisor: Dr. Yao-Yi Chiang | Research on Spatio-Temporal data
- Capture various spatial information from multi-modal data (Satellite, OpenStreetMap, Google Street View Image)
- Forecast fine-grained spatio-temporal weather data
- Process post-Optical Characteristic Recognition (post-OCR) from historical map images

Purdue University Fort Wayne
Graduate Research Thesis — Spring 2020 – Fall 2020
Advisor: Dr. Jin Soung Yoo | Machine Learning and Big Data
- Studied public bike-sharing demand predictions and impacts with air pollution and precipitation
- Used multiple machine learning algorithms for the bike demand models and evaluated performance

Business Intelligence and Information Management Lab — Summer 2020 – Fall 2020
Advisor: Dr. Adolfo S. Coronado | Machine Learning and Data Analytics
- Suggested a new objective approach of university ranking computation by comparing multiple models
- Used a machine learning supervised algorithm to evaluate each models' performance

TEACHING	**University of Minnesota – Twin Cities**	
	Lead Teaching Assistant	
	CSCI4707: Practice of Database System	Fall 2022
	CSCI1933: Introduction to Algorithms and Data Structures	Fall 2021
	CSCI1913: Introduction to Algorithms, Data Structures, and Program Development	Spring 2022
	Purdue University Fort Wayne	
	Graduate Teaching Assistant	Fall 2019 – Spring 2020
	CS364: Introduction to Database Systems in Department of Computer Science	
	CS160, CS161: Introduction to Computer Science I, II	
	Undergraduate Teaching Assistant	May 2018 – Spring 2020
	CS112: Computer Science for Everyone	

WORK EXPERIENCE	**Chamberlain Group**	Summer 2020
	Mobile Engineer Summer Intern	Oak Brook, Illinois
	Parkview Health	August 2018 – May 2019
	Back-end Developer	Fort Wayne, IN
	Purdue Indiana Manufacturing Competitiveness Center (IN-MaC)	May 2018 – March 2019
	Software Developer	Fort Wayne, IN

HONORS AND AWARDS	**Best PC member in CIKM 2022**	Fall 2022
	Graduate Teaching Assistant Scholarship	Fall 2019 – Spring 2020
	Chancellor's Merit Award Scholarship	Fall 2017 – Spring 2019
	Dual-Degree Program Scholarship	Fall 2017 – Spring 2019
	Dean's List and Semester Honors' Certificates	Fall 2018 – Spring 2019
	Academic Excellence Scholarship	Fall 2016

PROFESSIONAL SERVICE	**AAAI** International Workshop on Health Intelligence	2023
	CIKM Conference on Information and Knowledge Management (Best PC member award)	2022
	ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems	2022
	ACM SIGSPATIAL International Workshop on AI for Geographic Knowledge Discovery	2022

VOLUNTEER EXPERIENCE	**Girls Who Code at Purdue University Fort Wayne**	September 2018 – January 2019
	• Led female high school students in discussing computer science subjects	
	Volunteer, Big Event at Purdue University Fort Wayne	April 2018
	• Volunteered with non-profit group which gave away free clothes	
	Volunteer, 1st and 2nd Korea Festival at Fort Wayne, IN	September 2017,2018
	• Volunteered with the Korean community in Fort Wayne	
	Hana children's welfare church at Seoul, Korea	September 2014 – February 2016
	• Taught children aged from 7 to 15 in general subjects	

LEADERSHIP AND ACTIVITIES	**University of Minnesota – Twin Cities**	
	President of Korean Engineering Association	September 2022 – Present
	Vice-President of Korean Engineering Association	September 2021 – August 2022
	• Lead a community group as the vice-president	
	Purdue University Fort Wayne	
	President of Club Seoul	Fall 2017 – Summer 2018
	• Led a community group as the president of Club Seoul	

SOPT: Computer Club at Seoul, Korea   Fall 2015 – Spring 2016
  • Participated in study groups, created business model, implemented an Android mobile application

President of Bong-Dal-E: Volunteer Club at Seoul, Korea   Fall 2015– Spring 2016
  • Led a volunteer club as the president and bi-weekly volunteered at Hana welfare church

TECHNICAL   **Advanced** Pytorch, Python, Java, R, SQL, PySpark, Spark, Postgres
SKILLS   **Moderate** Hadoop, C++, NodeJS, HTML, CSS, JavaScript, MongoDB

LANGUAGE   Fluent in **English** and Native in **Korean**

REFERENCE   **Dr. Yao-Yi Chiang** *Ph.D. Advisor, Associate Professor*
                Department of Computer Science and Engineering
                University of Minnesota – Twin Cities
                612-625-4002, Email: yaoyi@umn.edu

                Dr. Adolfo S. Coronado *Interim Assistant Dean and Associate Professor*
                College of Engineering, Technology, and Computer Science
                Purdue University Fort Wayne
                260-481-6181, Email: coronado@pfw.edu

                Dr. Jin Soung Yoo *Professor and Director of Computer Science Graduate Program*
                Department of Computer Science
                Purdue University Fort Wayne
                260-481-6946, Email: yooj@pfw.edu