

Min Namgung

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<https://minnamgung.github.io/>

INTEREST	Spatial Artificial Intelligence, Spatiotemporal Data Mining, Deep Learning, Machine Learning	
EDUCATION	University of Minnesota – Twin Cities	Minneapolis, MN
	<i>Ph.D. student in Computer Science&Engineering (GPA 4.0/ 4.0)</i>	August 2021 – Present
	<i>CS Grad Coordinator in Women and BIPOC in CS&E</i>	August 2022 – Present
	Purdue University Fort Wayne	Fort Wayne, IN
	<i>Master of Science in Computer Science (GPA 4.0/ 4.0)</i>	December 2020
PUBLICATION	<ul style="list-style-type: none">Master’s Thesis: Performance Comparison of Public Bike Demand Predictions: The Impact of Weather and Air Pollution	
	Purdue University Fort Wayne	Fort Wayne, IN
	<i>Bachelor of Science in Computer Science (GPA 3.59/ 4.0)</i>	August 2017 – May 2019
	<ul style="list-style-type: none">Dual-Degree Program (Junior, Senior)	
	Seoul Women’s University	Seoul, Korea
POSTER & PRESENTATION	<i>Bachelor of Science in Computer Science</i>	March 2014 – May 2016
	<ul style="list-style-type: none">Dual-Degree Program (Freshman, Sophomore)	
	(Accepted) Min Namgung , Yao-Yi Chiang (GeoAI 2022): Incorporating Spatial Context for Post-OCR in Map Images	
	(Accepted) Jina Kim, Zekun Li, Min Namgung , Yao-Yi Chiang, Katherine McDonough, Valeria Vitale, Rainer Simon, Deborah Holmes-Wong (SIGSPATIAL 2022) A Collaborative, Semi-Automated System for Extracting and Linking Text from Historical Maps	
	Kim, Jina(*), Namgung, Min(*) , Uhl, Johannes H., Burghardt, Keith, Chiang, Yao-Yi, Leyk, Stefan, Lerman, Kristina. (2022, July 6). Identifying Street Name Evolution in Semantic, Temporal, and Geographic Spaces. Zenodo. https://doi.org/10.5281/zenodo.6802908 (* denotes equal contribution)	
RESEARCH EXPERIENCE	Namgung, Min (2022): Incorporating Prior Knowledge To Forecast Fine-Grained Cloud-Top Temperature (UCGIS 2022)	
	University of Minnesota	
	Knowledge Computing Lab	August 2021 – Present
	Advisor: Dr. Yao-Yi Chiang Research on Spatio-Temporal data	
	<ul style="list-style-type: none">Capture various spatial information from multi-modal data (Satellite imagery data, OpenStreetMap, Google Street View Image)Forecast fine-grained spatio-temporal weather dataProcess post-Optical Characteristic Recognition (post-OCR) from historical map imagesDiscover semantic types of street name evolution in temporal, and geographic spaces	
RESEARCH EXPERIENCE	Purdue University Fort Wayne	
	Graduate Research Thesis	Spring 2020 – Fall 2020
	Advisor: Dr. Jin Soung Yoo Machine Learning and Big Data	
	<ul style="list-style-type: none">Studied public bike-sharing demand predictions and impacts with air pollution and precipitationUsed 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

- Design and make homework materials in SQL
- hold weekly office hour

CSCI1933: Introduction to Algorithms and Data Structures

Fall 2021

- Designed and made weekly lab materials in Java and Python
- Implemented auto-grading testing codes for weekly labs and projects

CSCI1913: Introduction to Algorithms, Data Structures, and Program Development Spring 2022

- Helped reviewing weekly lab, project, and exams materials in Java
- Held weekly office hour

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

- Prepared supplementary materials in MySQL for CS364 and in Java for CS160, CS161
- Ran weekly labs twice a week and held weekly office hour for CS160, CS161
- Graded assignments and exams

Undergraduate Teaching Assistant

May 2018 – Spring 2020

CS112: Computer Science for Everyone

- Answered questions in person and online covered by web front-end (HTML, CSS, JAVASCRIPT)
- Helped professor in grading weekly assignments for 25 to 40 students

WORK

EXPERIENCE

Chamberlain Group

Summer 2020

Mobile Engineer Summer Intern

Oak Brook, Illinois

- Accepted the summer internship and signed a contract; however, it was canceled due to Covid-19

Parkview Health

August 2018 – May 2019

Back-end Developer

Fort Wayne, IN

- 2018-2019 Senior Capstone Design: **Runner Up Team Project** (2/13)
- Took charge of fully managing Database, controlled it with Node.js, and worked with Scrum team
- Created most JavaScript and Typescript functions, managed all Heatmap.js library

Purdue Indiana Manufacturing Competitiveness Center (IN-MaC)

May 2018 – March 2019

Software Developer

Fort Wayne, IN

- Developed front-end with .net MVC model and connected local DB to cloud server
- Worked with local companies (Zachary Confections, DairyChem), organized business model and prototype, and implemented new web pages to help their management
- Participated in weekly Scrum meeting and Sprint Review with clients

HONORS AND
AWARDS**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

VOLUNTEER EXPERIENCE	Girls Who Code at Purdue University Fort Wayne	September 2018 – January 2019
	<ul style="list-style-type: none"> Led female high school students in discussing computer science subjects 	
	Volunteer, Big Event at Purdue University Fort Wayne	April 2018
	<ul style="list-style-type: none"> Volunteered with non-profit group which gave away free clothes 	
	Volunteer, 1st and 2nd Korea Festival at Fort Wayne, IN	September 2017, 2018
	<ul style="list-style-type: none"> Volunteered with the Korean community in Fort Wayne 	
	Hana children's welfare church at Seoul, Korea	September 2014 – February 2016
	<ul style="list-style-type: none"> Taught children aged from 7 to 15 in general subjects 	
LEADERSHIP AND ACTIVITIES	University of Minnesota – Twin Cities	
	<i>President of Korean Engineering Association</i>	September 2022 – Present
	<i>Vice-President of Korean Engineering Association</i>	September 2021 – August 2022
	<ul style="list-style-type: none"> Lead a community group as the vice-president 	
	Purdue University Fort Wayne	
	<i>President of Club Seoul</i>	Fall 2017 – Summer 2018
	<ul style="list-style-type: none"> Led a community group as the president of Club Seoul 	
	SOPT: Computer Club at Seoul, Korea	Fall 2015 – Spring 2016
	<ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> Led a volunteer club as the president and bi-weekly volunteered at Hana welfare church 	
TECHNICAL SKILLS	Advanced Pytorch, Python, Java, R, SQL, PySpark, Spark, Postgres Moderate Hadoop, C++, NodeJS, HTML, CSS, JavaScript, MongoDB	
LANGUAGE	Fluent in English and Native in Korean	
REFERENCE	Dr. Yao-Yi Chiang <i>Ph.D. Advisor, Associate Professor</i>	
	Department of Computer Science and Engineering	
	University of Minnesota – Twin Cities	
	612-625-4002, Email: yaoyi@umn.edu	
	Dr. Adolfo S. Coronado <i>Interim Assistant Dean and Associate Professor</i>	
	College of Engineering, Technology, and Computer Science	
	Purdue University Fort Wayne	
	260-481-6181, Email: coronado@pfw.edu	
	Dr. Jin Soung Yoo <i>Professor and Director of Computer Science Graduate Program</i>	
	Department of Computer Science	
	Purdue University Fort Wayne	
	260-481-6946, Email: yooj@pfw.edu	