

Min Namgung

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<http://github.com/MinNamgung>

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
	<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
	<i>Bachelor of Science in Computer Science</i>	March 2014 – May 2016
	<ul style="list-style-type: none">• Dual-Degree Program (Freshman, Sophomore)	
PUBLICATION	(Submitted) Min Namgung , Yao-Yi Chiang (GeoAI SIGSPATIAL 2022): Incorporating Spatial Context for Post-OCR in Map Images	
	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)	
	Namgung, Min (2020) : Performance Comparison of Public Bike Demand Predictions: The Impact of Weather and Air Pollution. <i>Purdue University Graduate School. Thesis.</i> https://doi.org/10.25394/PGS.13353482.v1	
POSTER PRESENTATION	Namgung, Min (2022): Incorporating Prior Knowledge To Forecast Fine-Grained Cloud-Top Temperature (UCGIS 2022)	
RESEARCH EXPERIENCE	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">• Forecast fine-grained spatio-temporal weather data• Process post-Optical Characteristic Recognition (post-OCR) from historical map images• Discover semantic types of street name evolution in temporal, and geographic spaces	
	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 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

- 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

- Led female high school students in discussing computer science subjects

	Volunteer, Big Event at Purdue University Fort Wayne <ul style="list-style-type: none"> • Volunteered with non-profit group which gave away free clothes 	April 2018
	Volunteer, 1st and 2nd Korea Festival at Fort Wayne, IN <ul style="list-style-type: none"> • Volunteered with the Korean community in Fort Wayne 	September 2017, 2018
	Hana children's welfare church at Seoul, Korea <ul style="list-style-type: none"> • Taught children aged from 7 to 15 in general subjects 	September 2014 – February 2016
LEADERSHIP AND ACTIVITIES	University of Minnesota – Twin Cities <i>President of Korean Engineering Association</i> <i>Vice-President of Korean Engineering Association</i> <ul style="list-style-type: none"> • Lead a community group as the vice-president 	September 2022 – Present September 2021 – August 2022
	Purdue University Fort Wayne <i>President of Club Seoul</i> <ul style="list-style-type: none"> • Led a community group as the president of Club Seoul 	Fall 2017 – Summer 2018
	SOPT: Computer Club at Seoul, Korea <ul style="list-style-type: none"> • Participated in study groups, created business model, implemented an Android mobile application 	Fall 2015 – Spring 2016
	President of Bong-Dal-E: Volunteer Club at Seoul, Korea <ul style="list-style-type: none"> • Led a volunteer club as the president and bi-weekly volunteered at Hana welfare church 	Fall 2015– Spring 2016
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	