Changbeom Shim, Ph.D.

Research Associate ◇ Dept. of Electrical and Computer Engineering ◇ Curtin University

4.14, New Technologies Bld. (314) ◇ Kent St., Bentley ◇ Western Australia, 6102, Australia

http://scbeom.github.io/main ◇ scbeom@gmail.com

Education

Korea University	MAR. 2014 - AUG. 2019
Ph.D. in Computer Science and Engineering	*South Korea*

Korea University	MAR. 2007 - FEB. 2014
B.E. in Electronics and Information Engineering	*South Korea*

· On leave: SEPT. 2008 - FEB. 2011, Military Service

Professional Experiences

Department of Electrical and Computer Engineering at Curtin University NOV. 2019 - Present
Research Associate *Australia*

· Project 3: An intelligent system for crime analysis and prevention based on multi-object tracking and situational awareness
· Project 2: A data-driven system for privacy-preserving pandemic prevention
· Project 1: Efficient large-scale multi-object tracking

Database Laboratory at Korea University MAR. 2014 - AUG. 2019
Research Assistant *South Korea*

· Project 3: A research on safe and convenient big data processing methods
· Project 2: A research on privacy issues and privacy protection methods for social network services
· Project 1: An intelligent system for crime detection/prevention and public security based on CCTV bigdata

School of Engineering at RMIT University JAN. 2019 - FEB. 2019
Visiting Student of Dr. Du Yong Kim *Australia*

· Project: A research on random finite set approach to database applications

Korea Institute of Science and Technology Information (KISTI) JUL. 2013 - FEB. 2014
Student Researcher *South Korea*

· Project: Research on analysis and application platform technologies for science and technology big data

3D Information Processing Laboratory at Korea University JAN. 2011 - JUN. 2013
Student Researcher *South Korea*

Honors and Awards

FEB. 2019	KU Graduate Student Achievement Award, Korea University
JUL. 2018	Student Paper Contest Award, Korea Computer Congress (KCC)
FEB. 2018	Outstanding Ph.D. Candidate Paper Award, Korea University
OCT. 2017	Honorable Mention, IEEE Visual Analytics Science and Technology (VAST Challenge)
MAY 2015	Outstanding Paper Award, Korean DataBase Conference (KDBC)

Research Interests

Information Systems, Data Mining, and Machine Learning

- Query Processing, Spatio-Temporal Algorithms, Geo-Social Networks
- Bayesian Learning, Multi-Object Tracking

Publications

Submitted

S1 "SkyFlow: A Visual Analysis of High-dimensional Skylines in Time-series,"
Submitted

Journals

J5 **Changbeom Shim**, Gyuhyeon Sim, and Yon Dohn Chung,
"Cohesive Ridesharing Group Queries in Geo-Social Networks,"
IEEE Access, 2020

J4 Wooil Kim, **Changbeom Shim**, Wan Heo, Sungmin Yi, and Yon Dohn Chung,
"Moving View Field Nearest Neighbor Queries,"
Data & Knowledge Engineering, 2019

J3 **Changbeom Shim**, Wooil Kim, Wan Heo, Sungmin Yi, and Yon Dohn Chung,
"Nearest Close Friend Search in Geo-Social Networks,"
Information Sciences, 2018

J2 **Changbeom Shim**, Wooil Kim, Wan Heo, Sungmin Yi, and Yon Dohn Chung,
"ℓ-Close Range Friends Query on Social Grid Index,"
IEICE Transaction on Information and Systems, 2017

J1 Sungmin Yi, **Changbeom Shim**, and Yon Dohn Chung,
"Reverse View Field Nearest Neighbor Queries,"
Information Sciences, 2017

Conferences

C1 Wooil Kim, **Changbeom Shim**, Ilhyun Suh, and Yon Dohn Chung,
"A Visual Explorer for Analyzing Trajectory Patterns,"
IEEE Conference on Visual Analytics Science and Technology, 2017

Patents

P2 Yon Dohn Chung, **Changbeom Shim**, and Wooil Kim,
"Device for searching nearest close friends,"
Oct. 2020, Korea Registration Number: 10-2172236

P1 Yon Dohn Chung, and **Changbeom Shim**,
"Device and method for recommending ride sharing group, recording medium for performing the method,"
Jan. 2020, Korea Registration Number: 10-2064376

Teaching Experiences at Korea University

Lecturer

Fall 2018	COSE214: Algorithm

Teaching Assistant

Fall 2017	COSE156: Python Programming
Spring 2016	COSE213: Data Structure
Fall 2015	COSE242: Data Communication
Fall 2014	COSE102: Computer Programming

Technical Experiences

Computer Languages	Java, Matlab, Python
Others	PostgreSQL, MySQL, Hadoop

References

References available upon request