

# Changbeom Shim, Ph.D.

Research Associate ◊ Dept. of Electrical and Computer Engineering ◊ Curtin University  
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## Education

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<b>Korea University</b> Ph.D. in Computer Science and Engineering	MAR. 2014 - AUG. 2019 <i>South Korea</i>
<b>Korea University</b> B.E. in Electronics and Information Engineering · On leave: SEPT. 2008 - FEB. 2011, Military Service	MAR. 2007 - FEB. 2014 <i>South Korea</i>

## Professional Experiences

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<b>Department of Electrical and Computer Engineering at Curtin University</b> Postdoctoral Research Associate · 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	NOV. 2019 - Present <i>Australia</i>
<b>Database Laboratory at Korea University</b> Research Assistant · 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	MAR. 2014 - AUG. 2019 <i>South Korea</i>
<b>School of Engineering at RMIT University</b> Visiting Student of Dr. Du Yong Kim · Project: A research on random finite set approach to database applications	JAN. 2019 - FEB. 2019 <i>Australia</i>
<b>Korea Institute of Science and Technology Information (KISTI)</b> Student Researcher · Project: Research on analysis and application platform technologies for science and technology big data	JUL. 2013 - FEB. 2014 <i>South Korea</i>
<b>3D Information Processing Laboratory at Korea University</b> Student Researcher	JAN. 2011 - JUN. 2013 <i>South Korea</i>

## Honors and Awards

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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

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Databases, Data Mining, and Machine Learning

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

## Publications

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### 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,  
“ $\ell$ -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

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- 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

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### 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

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<b>Computer Languages</b>	Java, Matlab, Python
<b>Others</b>	PostgreSQL, MySQL, Hadoop

## References

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References are provided upon request.