

# Wooshik, Myung

Department of Precision Instrument

Tsinghua University

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## Education

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|---------------------|---|----------------|
| SEP 2018 – Present  | <b>Tsinghua University</b><br>- Candidate for Master of Science in Precision Instrument<br>- Research interests: Brain inspired computing, Machine Learning, Deep Learning, Reinforcement Learning, Routing Algorithm for NoC Architecture<br>- Current research: Model-to-Mapping for Neuromorphic Computing Device<br>- Major GPA: 3.73/4.0 | Beijing, China |
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| JUL 2013 – SEP 2017 | <b>Tsinghua University</b><br>- Bachelor of Science in Precision Instrument<br>- Thesis: 'Dielectrophoresis-Enhanced Cell Sensing with Gold Nanohole Arrays'  | Beijing, China |

## Research Experience

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| SEP 2019 – AUG 2020 | <b>CBICR at Tsinghua University</b><br><i>Member of Designing Routing part of TIANJIC</i><br>- Project : Design a structure of router for Multi-chip Many-core neuromorphic system.<br>- Designing Routing Strategy on Multi-chip Many-core system for avoiding several routing problems.<br>- Build a simulator to evaluate the routing performance of TIANJIC.<br>- Two version of program: written in C++ and python. | Beijing, China |
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| NOV 2017 – APR 2018 | <b>CBICR at Tsinghua University</b><br>- Project: Modification of NoC Simulator BookSim2.0<br>- BookSim 2.0 is an C++ based open source simulator for Network-on-Chip. To meet our special needs of the project, the source code of the simulator was modified to operate multicast routing under the fixed traffic pattern.   | Beijing, China |

## Papers

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| Under Review | <b>TNNLS - Policy Gradient-based Core Placement Optimization for Multi-chip Many-core systems (1<sup>st</sup> Author)</b><br>Keyword: Physical mapping, Deadlock-free placement, reinforcement-learning, community detection algorithm |
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| APR 2018     | <b>ICIASE - Performance Analysis of Routing Algorithms in Mesh Based Network on Chip using Booksim Simulator (1<sup>st</sup> Author)</b><br>Keyword: Network-on-chip, routing algorithm, performance comparison                        |

## Work Experience

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| NOV 2019 – Present | <b>Korean Scientists and Engineers Association in China (KSEACH)</b><br><i>Assistant Administrator and Associate Member</i><br>- Help professors and members of KSEACH organize general meetings and periodic conferences to promote academic exchanges among professionals and experts in China | Beijing, China |
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| OCT 2019 –<br>SEP 2020 | <b>China AI Service and APP Analysis with NAVER</b><br><i>Freelancer</i>  | Beijing, China |
|                        | <ul style="list-style-type: none"><li>- Research and follow up on the services of APPs that are widely used in China</li><li>- Analyze and summarize high level AI technologies of APPs (Image classification, NLP, Recommendation algorithm etc.)</li></ul>  |                |
| SEP 2019 –<br>Present  | <b>Tsinghua University Korean Graduate Student Association</b>  | Beijing, China |
|                        | <ul style="list-style-type: none"><li>- Plan and conduct events such as forums to facilitate active exchange of information and academic researches among Korean graduate students, professors, corporates, organizations, and embassy in Beijing</li><li>- Connect Korean graduate students at Tsinghua to Career resources and programs, encouraging them to explore more career opportunities in China</li></ul> |                |

## Honors and Awards

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| SEP 2018 –<br>Present | <b>Beijing Government Scholarship (Full Funding)</b> |
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## Skills

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- Programs : **MATLAB, COMSOL, ADOBE ILLUSTRATOR**
- Computer Languages : **Python (Tensorflow, Keras, Pytorch), C/C++, HTML5**
- Language: **Native Korean, Fluent in English, and Chinese**