

Seonghyeon Moon

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| EDUCATION | Gwangju Institute of Science and Technology | Mar. 2015 - Feb. 2017 |
| | ▪ M.S. in Mechanical Engineering Adviser: Prof. Kwanghee Ko Thesis: Parameterization of Cylindrical Unorganized Point Clouds for Surface Fitting | Gwangju, South Korea |
| | Northumbria University | Mar. 2009 - Feb. 2015 |
| | ▪ B.S. in Manufacturing and Systems Design Engineering Graduated with First Class Honours | Newcastle, U.K. |
| | Seoul National Univerisity of Science and Technology | Mar. 2009 - Feb. 2015 |
| | ▪ B.S. in Industrial and Information Systems Engineering Graduated Summa Cum Laude | Seoul, South Korea |

PUBLICATIONS JOURNALS

- [1] Seonghyeon Moon and Kwanghee Ko, "A point projection approach for improving the accuracy of the multilevel B-spline approximation", *Journal of Computational Design and Engineering*, [Revised manuscript submitted] [pdf]

CONFERENCES

- [1] S.H. Moon, J.H. Park and K.H. Ko, "Adaptive Method for 2.5D Scattered Point Approximation", in *23rd ACM Symposuium on Virtual Reality Software and Techonology (VRST2017)*, Guthenberg, Sweden, Nov. 2017. [pdf]
- [2] Seonghyeon Moon, Jin-Eon Park and Kwanghee Ko, "Parameterization of unorganized cylindrical point clouds for least squares B-spline surface fitting", in *25th International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision 2017 (WSCG2017)*, Plzen, Czech Republic, Jun. 2017. [pdf]

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| RESEARCH EXPERIENCE | Modeling and Simulation Labortory | Mar. 2015 - Feb. 2017 |
| | Gwangju Institute of Science and Technology <i>Research Assistant (Advisor : Kwanghee Ko)</i> | Gwangju, South Korea |
| | ▪ Led project on projection mapping for a medium object without distortion -Identified and checked project progress and set overall direction -Implemented projector and Kinect calibration and suggested methods for distortion correction using calibration results | |
| | ▪ Participated project on development of 3D scanning application for plant engineering -Learned and implemented scattered data approximation using Multilevel B-Spline | |

- Participated project on projection mapping for free-form surfaces
 - Implemented projector and camera calibration to display the image at the desired position

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| TEACHING | Numerical Analysis and Visualization Gwangju Institute of Science and Technology <i>Teaching Assistant</i> | Fall, 2016 Gwangju, South Korea |
| | <ul style="list-style-type: none"> ■ Taught MATLAB, graded exams and programming assignments for around 40 undergraduates. | |
| | Physics Seoul National Univerisity of Science and Technology <i>Course Tutor</i> | Fall, 2012 Seoul, South Korea |
| | <ul style="list-style-type: none"> ■ Assisted 3 to 4 weak undergraduate students to improve their understanding of physics | |
| HONORS & AWARDS | <ul style="list-style-type: none"> ■ Government Scholarship, Gwangju Institute of Science and Technology, 2015, 2016 | |
| | <ul style="list-style-type: none"> ■ Award for graduating Summa Cum Laude, Seoul National Univerisity of Science and Technology, 2015 ■ Award for High G.P.A., Seoul National Univerisity of Science and Technology, 2010 | |
| WORK EXPERIENCE | Mandatory Military Service <i>ATCIS Technician (Army Tactical Command Information System)</i> | Feb. 2010 – Nov. 2011 Hwacheon, South Korea |
| | <ul style="list-style-type: none"> ■ Maintained every computer in the 7th Division (10-thousand army) approximately five hundred ■ Maintained network hardwares (Router, Switch) ■ Maintained ATCIS system (Army Tactical Command Information System): data backup, intranet maintenance, intranet installation | |
| ACTIVITIES | International Summer School Seoul National Univerisity of Science and Technology <i>Volunteer</i> | Jun. 2013 Seoul, South Korea |
| | <ul style="list-style-type: none"> ■ Helped foreign students who participated in summer school adapt to life in Korea | |
| | Ruby, School Magazine Club Seoul National Univerisity of Science and Technology <i>The editorial staff</i> | Sep. 2013 – Aug. 2013 Seoul, South Korea |
| | <ul style="list-style-type: none"> ■ Participated in publishing three magazines. Wrote four articles and discussed overall design and structure of the magazine <ul style="list-style-type: none"> [1] UN's plan to decrease 23 bilion population to 13 bilion [2] Global talant project [3] Right-minded [4] The letter from Newcastle, U.K. | |

Intergovernmental youth exchange program

Nov. 2012

South Korea and Indonesia

Seoul, South Korea and Jakarta, Indonesia

Leader of 20 Korean youth delegates (From high school to university students)

- Counselling and made decision for young students so that the program proceeded without any problems
- Major activities : Visiting youth institutions in Indonesia, Culture exchange, Homestay, Korea Cultural performances for Indonesia students

SKILLS**Advanced :** C++, MATLAB**Intermediate :** C**Beginner :** HTML, JAVA**LANGUAGES**

- Korean: Native
- English: Fluent