

# Sangyoon Lee

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## CONTACT

Ph.D. student  
School of Computing, KAIST  
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KAIST, 291 Daehak-ro, Yuseong-gu  
Daejeon 34141, Republic of Korea

## RESEARCH INTERESTS

Human-Computer Interaction

## EDUCATION

### **Korea Advanced Institute of Science and Technology (KAIST)**

Ph.D. student in Computer Science  
*Advisor:* Geehyuk Lee, Ph.D.

Daejeon, Korea  
MAR. 2018 – Present

### **Korea Advanced Institute of Science and Technology (KAIST)**

M.S. in Computer Science  
*Thesis:* “Diagnosing and Coping with Mode Errors in using a Dual-language Keyboard”  
*Advisor:* Geehyuk Lee, Ph.D.

Daejeon, Korea  
2018

### **Korea Advanced Institute of Science and Technology (KAIST)**

B.S. in Computer Science

Daejeon, Korea  
2016

## PUBLICATIONS

### **International Conference Papers**

1. **Diagnosing and Coping with Mode Errors in Korean-English Dual-language Keyboard**  
Sangyoon Lee, Jaeyeon Lee, Geehyuk Lee  
CHI 2019
2. **Auto-switching List Search Interface for Touchscreen Smartwatches**  
Jingun Jung, Sangyoon Lee, Sunggeun Ahn, and Geehyuk Lee  
MobileHCI 2018

### **Domestic Conference Papers**

1. **First Principles Study of spin polarization in Fe-doped monolayer C<sub>2</sub>N-h<sub>2</sub>D**  
Sangyoon Lee and Geumbi Jung  
EDISON Challenge 2016
2. **An experimental comparison of user postures between tablebased reading activities and book-based reading activities**  
Sangyoon Lee  
KCC 2015

### **Extended Abstracts: Demonstrations**

1. **MirrorPad: A Touchpad for Direct Pen Interaction on a Laptop**  
Sangyoon Lee and Geehyuk Lee  
ISS 2019

### **Patents**

1. **Smart-toggle for auto recovering from Korean-English mode errors**  
KR Patent Application. 10-2019-0060681, 2019-05-23.

WORK EXPERIENCE	<b>Gold Spoon</b>	MAY. 2015 – FEB. 2016
	Software Engineer, Co-Founder - Backend engineer, API server construction <i>Skills:</i> Django, Go, Meteor, MongoDB, AWS, React.js, Youtube API	
	<b>Langpoo</b>	JAN. 2015 – MAR. 2015
	Software Engineer - Backend engineer, API server construction <i>Skills:</i> Django, AWS, RabbitMQ, Android GCM	
	<b>Graduate School of Science and Technology Policy, KAIST</b>	JUN. 2014 – JAN. 2015
	Work-study Program - Homepage renewal	
	<b>Computational Nanotech Lab, KAIST</b>	JAN. 2014 – DEC. 2015
	Research Intern & Software Engineer - Hybrid Interface Materials DB construction - Application of the Machine Learning Algorithm to Electronic Structure Calculations <i>Skills:</i> Django, Mysql, Scikit-learn, Machine Learning techniques, Tensorflow <i>Publications:</i>	
	1. <b>Application of the Machine Learning Algorithm to Electronic Structure Calculations: A Test Case of B/N-doped Graphene</b> Kim, et al KPS, 2016. - Contribution in developing the web application & machine learning techniques.	
	<b>Interactive Computing Lab, KAIST</b>	JAN. 2014 – MAR. 2014
ACTIVITIES	Research Intern - Machine State Estimation Using Electric Current Measurement Sensor <i>Skills:</i> Android	
	<b>Social Computing Lab, KAIST</b>	MAY. 2013 – JUN. 2015
	Research Intern & Software Engineer - User Depression Mitigation Project <i>Skills:</i> Facebook login API, Flask, Django, Html, Javascript, CSS <i>Publications:</i>	
	1. <b>Manifestation of depression and loneliness on social networks: a case study of young adults on Facebook</b> Park, Sungkyu, et al CSCW, 2015. - Contribution in developing the web application.	
	<b>Intelligence in Science &amp; Technology, KISTI</b>	JUN. 2013 – AUG. 2013
	Summer Intern - Big data(scientist's bio) analysis and processing <i>Skills:</i> Mysql, Java, Hadoop, MapReduce	
	<b>CS Undergraduate Student Council, KAIST</b>	JAN. 2014 – JAN. 2015
AWARDS	President	
	<b>CS Undergraduate Student Council, KAIST</b>	JAN. 2013 – JAN. 2014
	Vice Representative of '12	
	<b>Naver '19 PhD Fellowship</b>	Fall 2019
	PhD Fellowship Award	
	<b>ISS '19 Demonstration</b>	Fall 2019

	Honorable Mention Demo Award	
	<b>UIST '17 Student Innovation Contest</b>	Fall 2017
	People's Choice award	
OPEN SOURCE CONTRIBUTION	<b>Konlpy, Konlpy</b> MAY. 2016 – Present Python package for Korean natural language processing <i>Url:</i> <a href="https://github.com/konlpy/konlpy">https://github.com/konlpy/konlpy</a> <b>PinPoint, Naver</b> DEC. 2014 – Present Pinpoint is an open source APM (Application Performance Management) tool for large-scale distributed systems written in Java <i>Url:</i> <a href="https://github.com/naver/pinpoint">https://github.com/naver/pinpoint</a>	
OPEN SOURCE PROJECT	<b>Web Speech AI for youtube player</b> SEP. 2017 – Present This project is a speech-ai for managing youtube video player. This is a wrapper server written by Flask to integrate <a href="http://api.ai/">http://api.ai/</a> and Mozilla Web speech recognition api <i>Url:</i> <a href="https://github.com/pinetree408/speech-ai">https://github.com/pinetree408/speech-ai</a> <b>Wrist Gesture Recognizer On Smartwatch</b> SEP. 2017 – Present This project recognizes four wrist gesture on smartwatch with machine learning technique(SVM) <i>Url:</i> <a href="https://github.com/pinetree408/tilt_selection_server">https://github.com/pinetree408/tilt_selection_server</a> <b>BookmarksReminder</b> SEP. 2016 – Present This chrome extension gives you a reminder alarm for bookmarks <i>Url:</i> <a href="https://chrome.google.com/webstore/detail/bookmarksreminder/jeegdckmnjonkoeffmnhokohkbbheoeadi">https://chrome.google.com/webstore/detail/bookmarksreminder/jeegdckmnjonkoeffmnhokohkbbheoeadi</a> <b>korean-corpus-generator</b> JUL. 2016 – Present Python package for Korean corpus generating <i>Url:</i> <a href="https://github.com/pinetree408/korean-corpus-generator">https://github.com/pinetree408/korean-corpus-generator</a> <b>VFT</b> MAY. 2016 – Present Visualization Tool for Filtering Test Logs based on Eclipse plug-in <i>Url:</i> <a href="https://github.com/pinetree408/VFT">https://github.com/pinetree408/VFT</a> <b>django-facebook-auth</b> MAY. 2015 – Present Django facebook auth helper <i>Url:</i> <a href="https://pypi.python.org/pypi/django-facebook-auth-helper">https://pypi.python.org/pypi/django-facebook-auth-helper</a>	
TEACHING EXPERIENCE	<b>Teaching Assistant</b> CS550 Software Engineering Spring 2019 CS584 Human-Computer Interaction Fall 2018 CS420 Compiler Design Fall 2016 CS220 Programming Principles Spring 2016  <b>Tutor</b> CS311 Computer Architecture Fall 2016	
INVITED TALKS	<b>Coping with Mode Errors in Dual-language Keyboard</b> OCT. 2019 Hancom TechDay, Hancom	
ACADEMIC SERVICES	<b>Reviewer</b> CHI' 19, MobileHCI' 19	

