Sangyoon Lee

CONTACT

Ph.D. student

School of Computing, KAIST Kim Byung Ho IT Building (N1) #722 Email: pinetree408@gmail.com KAIST, 291 Daehak-ro, Yuseong-gu Daejeon 34141, Republic of Korea

URL: http://github.com/pinetree408

RESEARCH **INTERESTS** **Human-Computer Interaction**

EDUCATION

Korea Advanced Institute of Science and Technology (KAIST)

Daejeon, Korea MAR. 2018 - Present

Ph.D. student in Computer Science

Advisor: Geehyuk Lee, Ph.D.

Korea Advanced Institute of Science and Technology (KAIST)

Daejeon, Korea

M.S. in Computer Science

2018

Thesis: "Diagnosing and Coping with Mode Errors in using a Dual-language Keyboard"

Advisor: Geehyuk Lee, Ph.D.

Korea Advanced Institute of Science and Technology (KAIST)

Daejeon, Korea

B.S. in Computer Science

2016

PUBLICATIONS

International Conference Papers

- 1. MirrorPad: Mirror on Touchpad for Direct Pen Interaction in the Laptop Environment Sangyoon Lee, Youn-kyung Lim, Geehyuk Lee CHI 2020 (To appear)
- 2. Voice+Tactile: Augmenting In-vehicle Voice User Interface with Tactile Touchpad Interaction Jingun Jung, Sangyoon Lee, Jiwoo Hong, Eunhye Youn, and Geehyuk Lee CHI 2020 (To appear)
- 3. Diagnosing and Coping with Mode Errors in Korean-English Dual-language Keyboard Sangyoon Lee, Jaeyeon Lee, Geehyuk Lee CHI 2019
- 4. Auto-switching List Search Interface for Touchscreen Smartwatches Jingun Jung, Sangyoon Lee, Sunggeun Ahn, and Geehyuk Lee MobileHCI 2018

Domestic Conference Papers

1. Diagnosing and Coping with Annotation Distribution Problem in PDF Sangyoon Lee and Geehyuk Lee

HCI Korea 2020 (To appear)

2. First Principles Study of spin polarization in Fe-doped monolayer C2N-h2D Sangyoon Lee and Geumbi Jung EDISON Challenge 2016

3. An experimental comparison of user postures between tabletbased reading activities and bookbased reading activities

Sangyoon Lee KCC 2015

Extended Abstracts: Posters and Demos

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1. Verge-it: Gaze Interaction for a Binocular Head-Worn Display using Modulated Disparity Vergence Eye Movement

Sunggeun Ahn, Jeongmin Son, **Sangyoon Lee** and Geehyuk Lee CHI 2020 (To appear)

2. 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

Gold Spoon

MAY. 2015 – FEB. 2016

Software Engineer, Co-Founder

- Backend engineer, API server construction

Skills: Django, Go, Meteor, MongoDB, AWS, React.js, Youtube API

Langpoo JAN. 2015 – MAR. 2015

Software Engineer

- Backend engineer, API server construction

Skills: Django, AWS, RabbitMQ, Android GCM

Graduate School of Science and Technology Policy, KAIST

Jun. 2014 – Jan. 2015

Work-study Program

- Homepage renewal

Computational Nanotech Lab, KAIST

JAN. 2014 - DEC. 2015

Research Intern & Software Engineer

- Hybrid Interface Materials DB construction
- Application of the Machine Learning Algorithm to Electronic Structure Calculations

Skills: Django, Mysql, Scikit-learn, Machine Learning techniques, Tensorflow

Publications:

1. Application of the Machine Learning Algorithm to Electronic Structure Calculations: A Test Case of B/N-doped Graphene

Kim, et al

KPS, 2016.

- Contribution in developing the web application & machine learning techniques.

Interactive Computing Lab, KAIST

Jan. 2014 - Mar. 2014

Research Intern

- Machine State Estimation Using Electric Current Measurement Sensor

Skills: Android

Social Computing Lab, KAIST

May. 2013 – Jun. 2015

Research Intern & Software Engineer

- User Depression Mitigation Project

Skills: Facebook login API, Flask, Django, Html, Javascript, CSS

Publications:

1. Manifestation of depression and loneliness on social networks: a case study of young adults on Facebook

Park, Sungkyu, et al

CSCW, 2015.

- Contribution in developing the web application.

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Intelligence in Science & Technology, KISTI

Jun. 2013 - Aug. 2013

Summer Intern

- Big data(scientist's bio) analysis and processing

Skills: Mysql, Java, Hadoop, MapReduce

ACTIVITIES CS Undergraduate Student Council, KAIST

JAN. 2014 - JAN. 2015

President

CS Undergraduate Student Council, KAIST

JAN. 2013 – JAN. 2014

Vice Representative of '12

AWARDS Naver '19 PhD Fellowship

Fall 2019

PhD Fellowship Award

ISS '19 Demonstration

Fall 2019

Honorable Mention Demo Award

UIST '17 Student Innovation Contest

Fall 2017

People's Choice award

OPEN SOURCE CONTRIBUTION

Konlpy, Konlpy

MAY. 2016 - Present

Python package for Korean natural language processing

Url: https://github.com/konlpy/konlpy

PinPoint, Naver DEC. 2014 – Present

Pinpoint is an open source APM (Application Performance Management) tool for large-scale distributed

systems written in Java

Url: https://github.com/naver/pinpoint

OPEN SOURCE PROJECT Web Speech AI for youtube player

SEP. 2017 - Present

This project is a speech-ai for managing youtube video player.

This is a wrapper server written by Flask to integrate http://api.ai/ and Mozila Web speech recognition api

Url: https://github.com/pinetree408/speech-ai

Wrist Gesture Recognizer On Smartwatch

SEP. 2017 – Present

This project recognizes four wrist gesture on smartwatch with machine learning technique(SVM)

Url: https://github.com/pinetree408/tilt_selection_server

BookmarksReminder SEP. 2016 – Present

This chrome extension gives you a reminder alarm for bookmarks

Url: https://chrome.google.com/webstore/detail/bookmarksreminder/jeegdkkmnjonkoefmnhokohkbheoeadi

korean-corpus-generator Jul. 2016 – Present

Python package for Korean corpus generating

Url: https://github.com/pinetree408/korean-corpus-generator

VFT MAY. 2016 – Present

Visualization Tool for Filtering Test Logs based on Eclipse plug-in

Url: https://github.com/pinetree408/VFT

django-facebook-auth MAY. 2015 – Present

Django facebbook auth helper

Url: https://pypi.python.org/pypi/django-facebook-auth-helper

TEACHING Teaching Assistant

EXPERIENCE CS584 Human-Computer Interaction Fall 2019

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CS550 Software EngineeringSpring 2019CS584 Human-Computer InteractionFall 2018CS420 Compiler DesignFall 2016CS220 Programming PrinciplesSpring 2016

Tutor

CS311 Computer Architecture Fall 2016

INVITED TALKS Coping with Mode Errors in Dual-language Keyboard Oct. 2019

Hancom TechDay, Hancom

ACADEMIC Reviewer

SERVICES CHI' 19, MobileHCI' 19

Last update: February 19, 2020