Suzi Kim

Updated October 24, 2021

Ph.D. Candidate, Geometric Computing Lab., School of Computing, KAIST

Email: kimsuzi@kaist.ac.kr GitHub: @suzikim Homepage: https://www.kimsuzi.com/cv

**Research interests** Computer graphics, video processing, 3D model processing

Education Ph.D. @KAIST Daejeon, South Korea

Geometric Computing Lab., School of Computing

Mar. 2016 – Present

Advisor: Prof. Sunghee Choi (GPA: 3.93 / 4.3)

M.S. @KAIST Daejeon, South Korea

Geometric Computing Lab., School of Computing Sep. 2014 – Feb. 2016

Advisor: Prof. Sunghee Choi (GPA: 3.98 / 4.3)

Thesis: Generation of Three-Dimensional Typography for Multiple Texts

B.S. @KAIST Daejeon, South Korea

Department of Computer Science Feb. 2008 – Feb. 2012

(GPA: 3.55 / 4.3, Cum Laude)

Exchange Researcher @Tokyo Tech Yokohama, Japan

Imaging Science and Engineering Lab., Jun. 2016 – Aug. 2016

Department of Information and Communications Engineering

Advisor: Prof. Hiroshi Nagahashi

Work Experiences Research Intern @Adobe Remote

Creative Technologies Lab Oct. 2021 – Dec. 2021

Full-time Developer @Prezi Budapest, Hungary

iOS Team Apr. 2013 – Aug. 2014

Development of the mobile Prezi application

Associate @DSME Geoje, South Korea

Information Technology Team, R&D Institute Jan. 2012 – Feb. 2013

Development of Android-based CAD applications

Intern @DSME Geoje, South Korea

Information Technology Team, R&D Institute Jul. 2011

Parsing of the loading tree structure for DEP simulation

Undergraduate Research Intern @KAIST Daejeon, South Korea

Visual Media Lab., Graduate School of Culture Technology Jan. 2010 - Jun. 2010

Advisor: Prof. Junyong Noh

Practical interface development based on fluid simulation

Undergraduate Research Intern @ETRI	Daejeon, South Korea
Vehicle & Defense IT Convergence Research Department	•
E-Navigation apparatus investigation and sensor simulator im	plementation for YAN
platform	
Undergraduate Research Intern @KAIST	Daejeon, South Korea
Korean Language Engineering Lab., A	ug. 2010 – Aug. 2011
Department of Humanities & Social Sciences	
Advisor: Prof. Bu-yong Shin	
Development of Windows-based HUPS (Hangul-based Universal Phonetic System)	
Best Paper Presentation Award	Aug. 2020
2020 Korea Computer Congress	
Best Paper Award	Dec. 2019
2019 Korea Software Congress	
Best Presenter Team on the Sustainability and Tourisn	n Aug. 2019
2019 AOTULE Summer Program	
Best Paper Presentation Award	Aug. 2019
2019 Korea Computer Congress	1108. 2017
Distinguished Paper Award	Jun. 2019
19th International Conference on Web Engineering	Juii. 2019
This international conference on web Engineering	
Best Teaching Assistant Awards	Aug. 2018
TA of CS408 Computer Science Project, School of Computin	g, KAIST
Best Paper Award	Jun. 2018
2018 Korea Computer Congress	
Best Teaching Assistant Awards	Aug. 2017
TA of CS504 Computational Geometry, School of Computing	_
Top 5 Best Presenter	Aug. 2016
The Multidisciplinary International Student Workshop 2016	7 tug. 2010
222 2222 2222 222 222 222 222 222 222	

**Honors and Awards** 

Scholarship Student

2015 WISET STEM Research Team Project, KIISE

**Best Paper Presentation Award** 

DSME (Daewoo Shipbuilding & Marine Engineering Co., Ltd)

Oct. 2015

Sep. 2010 - Dec. 2011

**Honorable Mention** Nov. 2009

The ACM Asia Programming Contest Seoul Site 2009

**Award for Outstanding Application of Formal Design Theories** Feb. 2009

**KAIST** 

Professional Activities

Innscid SP São Paulo, Brazil

The São Paulo School Of Advanced Science in Science Diplomacy Aug. 2019 and Innovation Diplomacy

University of São Paulo (USP)

**AOTULE Summer Program** 

Bandung, Indonesia

The Asia-Oceania Top University League on Engineering

Aug. 2019

Institut Teknologi Bandung (ITB)

**AOTULE Graduate Student Research Exchange** 

Yokohama, Japan

The Asia-Oceania Top University League on Engineering Jun. 2016 – Aug. 2016 Tokyo Institute of Technology (Tokyo Tech)

Green Challenge (GRØN DYST)

Copenhagen, Denmark

Technical University of Denmark (DTU)

Jun. 2015

International Publications

**Dynamic Closest Color Warping to Sort and Compare Palettes** 

Suzi Kim and Sunghee Choi

ACM SIGGRAPH 2021, Aug. 2021

**Automatic Color Scheme Extraction from Movies** 

Suzi Kim and Sunghee Choi

ACM International Conference on Multimedia Retrieval (ICMR), Jun. 2020

CityCraft: 3D Virtual City Creation from a Single Image

Suzi Kim, Dodam Kim, and Sunghee Choi

The Visual Computer, May. 2020. (Online published: May. 2019)

**DotCHA: An Interactive 3D Text-based CAPTCHA** 

Suzi Kim and Sunghee Choi

Journal of Web Engineering, Jan. 2020

The Hitchhiker's Guide to the Eyewear Applications

Suzi Kim and Sunghee Choi

EyeWear: Third Workshop on Eye Wear Computing collocated with UbiComp/ISWC,

Sep. 2019

#### **DotCHA: A 3D Text-based Scatter-type CAPTCHA**

Suzi Kim and Sunghee Choi

19th International Conference on Web Engineering (ICWE), Jun. 2019 (Distinguished Paper Award)

## Automatic Tooth Segmentation of Dental Mesh Using a Transverse Plane

Suzi Kim and Sunghee Choi

40th International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), Jul. 2018

## Automatic Generation of 3D Typography

Suzi Kim and Sunghee Choi

ACM SIGGRAPH 2016 (poster), Jul. 2016

## An Easy Generation of Thriller Movie Poster from 3D Models

Suzi Kim, Sunghee Choi and Hiroshi Nagahashi

The Multidisciplinary International Student Workshop (MISW), Aug. 2016

## **Eco Image Printing**

Heonjun Park and Suzi Kim GRØN DYST 2015, Jun. 2015

·

# Domestic Publications

# Color Palettes Comparison Using Cluster-based Hausdorff Distance

Suzi Kim and Sunghee Choi

KIISE Transactions on Computing Practices, Vol. 27, No. 10, pp. 492-496, Oct. 2021

## Color Scheme Extraction Based on Image Segmentation and Saliency Map

Suzi Kim and Sunghee Choi

Journal of KIISE, Vol. 48, No. 3, pp. 302-307, Mar. 2021

#### **Cluster-based Color Palettes Comparison**

Suzi Kim and Sunghee Choi

Korea Computer Congress (KCC), Jul. 2020

### **CNN-based Real-time Grasping Point Detection Using RGB-D Images**

Suzi Kim and Sunghee Choi

KIISE Transactions on Computing Practices, Vol. 26, No. 2, pp. 116–121, Feb. 2020

#### Color Scheme Extraction Using Segmentation and Saliency Maps

Suzi Kim and Sunghee Choi

Korea Software Congress (KSC), Dec. 2019

# **CNN-based Grasping Box Detection**

Suzi Kim and Sunghee Choi

## Saliency-based SVG Image Placeholder Generation

Suzi Kim and Sunghee Choi

Journal of KIISE, Vol. 46, No. 1, pp. 39-44, Jan. 2019

# **Saliency-based Pixel Art Image Generation**

Suzi Kim and Sunghee Choi

Korea Software Congress (KSC), Dec. 2018

## Saliency-based SVG Image Placeholder Generation

Suzi Kim and Sunghee Choi

Korea Computer Congress (KCC), Jun. 2018

# Development of Scene-based Movie Recommendation Algorithm

<u>Suzi Kim</u>, Doheon Hwang, SooKyung Ahn, Gayoung Lee, SuA Yang, Yucheong Cho, and Sunghee Choi

2016 Vol.2 WISET Junior Science & Technology Research Reports, Nov. 2016

### **Development of Korean Font Detection System from Image**

<u>Suzi Kim</u>, Jiyi Lee, Minsun Hong, Yerim Kang, Jinyoung Kim, Soyeon Park, Jiwon Lee, and Sunghee Choi

2015 Vol.1 WISET Junior Science & Technology Research Reports, Nov. 2015

# Interface Development for Improving Efficiency of Fluid Special Effects Production

Soomin Yang, <u>Suzi Kim</u>, Taekwon Jang, and Junyong Noh In Proc. of Korea Computer Graphics Society (KCGS) 2010 (Poster), Jun. 2010

#### Patents

### Method and Apparatus for Extracting Color Scheme from Video

Sunghee Choi and Suzi Kim

KR1020200016109 (Feb. 2020), KR102245349 (Apr. 2021), PCT/KR2020/019061, CN202110022034.0 (Jan. 2021), US17143577 (Jan. 2021)

### **DotCHA: A 3D Text-based Scatter-type CAPTCHA**

Sunghee Choi and Suzi Kim KR1020170049182 (Apr. 2017)

#### Method and Apparatus for Pre-treating Image for Printing

Heonjun Park and Suzi Kim

KR1020150124385 (Sep. 2015), KR101769945 (Aug. 2017)

#### Method and Apparatus for Simulating Collision Splash

Soomin Yang, Suzi Kim, Taekwon Jang, and Junyong Noh

KR1020100077394 (Aug. 2010), KR101068673 (Sep. 2011)

# Mobile Application for Displaying CAD Drawing

**DSME** 

Program Registration: C-2012-021509 Korea Copyright Commission, Oct. 2012

# **Desktop-based Program for Viewing CAD Drawing**

**DSME** 

Program Registration: C-2012-021507 Korea Copyright Commission, Oct. 2012

# Webservice Program for Viewing CAD Drawing

**DSME** 

Program Registration: C-2012-021508 Korea Copyright Commission, Oct. 2012

#### **Teaching Assistant**

# CD401: Multidisciplinary Capstone Design

Spring 2019

K-School, KAIST

### **Counseling Assistant**

Fall 2018

School of Computing, KAIST

# **CS504: Computational Geometry**

Fall 2017, Spring 2018

School of Computing, KAIST

## **CS408: Computer Science Project**

Spring 2017

School of Computing, KAIST

### **CS300: Introduction to Algorithms**

Spring 2016, Fall 2016

School of Computing, KAIST

#### **CS204: Discrete Mathematics**

Spring 2015

School of Computing, KAIST

#### **CS101: Introduction to Programming**

Fall 2014

Department of Computer Science, KAIST

#### **HSS277: The World of Musicals**

Spring 2011, Fall 2011

School of Humanities & Social Sciences, KAIST

### **HSS186: Understanding Music and Music History**

Fall 2011

School of Humanities & Social Sciences, KAIST

Reviewer IEEE EMBC 2019

41st Annual International Conference of the IEEE Engineering in Medicine & Biology Society