Yoonsang Lee

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Academic Work Experience

Assistant Professor, Hanyang University, Seoul, Korea — Mar 2018 - present

Assistant Professor, Kwangwoon University, Seoul, Korea — Mar 2016 - Feb 2018

Education

Ph.D., Electrical Engineering and Computer Science, Seoul National University — Aug 2014
Thesis: Control of Physically Simulated Humanoids for Generating Realistic Human Locomotion

B.S., Mechanical and Aerospace Engineering, Seoul National University — Aug 2007

Publications

Control of an Iguana Character Using Soft-Body Simulation,
Taesoo Kwon, Hoimin Kim, **Yoonsang Lee**
IEEE Access, Volume 6 Issue 1, Dec 2018

Performance-Based Biped Control using a Consumer Depth Camera,
Yoonsang Lee, Taesoo Kwon,
Computer Graphics Forum (Eurographics 2017), Volume 36 Issue 2, 387-395, May 2017

Push-Recovery Stability of Biped Locomotion,
Yoonsang Lee, Kyungho Lee, Soon-Sun Kwon, Jiwon Jung, Carol O'Sullivan, Moon Seok Park, Jehee Lee,
ACM Transactions on Graphics (SIGGRAPH Asia 2015), Volume 34 Issue 6, Article No. 180, November 2015

Locomotion Control for Many-Muscle Humanoids,
Yoonsang Lee, Moon Seok Park, Taesoo Kwon, Jehee Lee,
ACM Transactions on Graphics (SIGGRAPH Asia 2014), Volume 33 Issue 6, Article No. 218, November 2014

Data-Driven Biped Control,
Yoonsang Lee, Sungeun Kim, Jehee Lee,
ACM Transactions on Graphics (SIGGRAPH 2010), Volume 33 Issue 6, Article No. 218, November 2014

Conference Presentations & Invited Talks

Performance-Based Biped Control using a Consumer Depth Camera
Eurographics 2017, Lyon, France — Apr 2017

Make It Walk! : Locomotion Control
Invited talk, Korea Computer Graphics Society Conference, Sokcho, Korea   Jul 2016

Research on Physically-Based Control & Working at Samsung
Hanyang University, Seoul, Korea   May 2016

Push-Recovery Stability of Biped Locomotion
SIGGRAPH Asia 2015, Kobe, Japan   Nov 2015

Locomotion Control for Many-Muscle Humanoids
SIGGRAPH Asia 2014, Shenzhen, China   Dec 2014

Data-Driven Biped Control
Korea Computer Graphics Society Conference, Jeju, Korea   Aug 2010
SIGGRAPH 2010, Los Angeles, USA   Jul 2010
Human Computer Interaction Korea Conference, Pyeongchang, Korea   Jan 2011

Physically Based Character Simulation
Human Computer Interaction Korea Conference, Pyeongchang, Korea   Jan 2010

Other Work Experience

Samsung Electronics Co., Ltd.   Sep 2014 - Feb 2016
Senior Engineer. Developed DALi - Samsung's home-grown, open-source & cross-platform 3D UI framework. Based on OpenGL ES and aims for rich and high-performance UI applications for embeded systems. Part of Tizen native API since Tizen 2.4.

Neowiz Corp.   2004 - 2005
Software Developer. Developed Tarchy - an instant messenger for Neowiz's community service, which occupied a third position in the domestic market.

Neoage Corp.   2003
Software Developer

Samsung Advanced Institute of Technology   Winter 2002
Software Intern

Academic Services

Program commitee: KCGS   2016, 2017

Reviewer: SIGGRAPH, SIGGRAPH Asia, IJHFMS, KCGS, IEEE TVCG, Eurographics

Open Source Projects

Personal projects:

QFEnter (https://github.com/yssl/QFEnter)

    - A vim plug-in to open a Quickfix item in a selected window.

VIntSearch (https://github.com/yssl/VIntSearch)

    - A vim plug-in providing an integrated interface across various types of searches.

AutoCWD.vim (`https://github.com/yssl/AutoCWD.vim`)

    - Auto current working directory update system for vim (vim plug-in).

TWcmd.vim (`https://github.com/yssl/TWcmd.vim`)

    - Vim's wincmd-style extended tab / window moving commands (vim plug-in).

SequentialLauncher.py (`https://github.com/yssl/SequentialLauncher.py`)

    - Automates launches of any command line interface processes and logs all their output to a file.

PACERs (`https://github.com/yssl/PACERs`)

    - Programming Assignments Compiling, Executing, and Reporting system

At work:

DALi (`https://developer.tizen.org/dev-guide/2.4b/org.tizen.ui.practices/html/native/dali/`)

    - Samsung's home-grown, open-source & cross-platform 3D UI framework. Based on OpenGL ES and aims for rich and high-performance UI applications for embedded systems. Part of Tizen native API since Tizen 2.4. Currently hosted in the Tizen open-source repository server (review.tizen.org).

Honors and Awards

Best Lecture Award (*Lecture: C Programming*), Kwangwoon University, 2017.

Lecture & Research Scholarship, Seoul National University, 2007, 2011.

Natural Science and Engineering Graduate Scholarship, Korea Science and Engineering Foundation, 2008.

Superior Academic Performance Scholarship, Seoul National University, 2007

Patents

APPARATUS AND METHOD FOR BIPED CONTROL,
Yoonsang Lee.

    - Korea Registeration, 10-1895331, 2018/8/30.

APPARATUS AND METHOD FOR CONTROLLING A DATA-BASED BIPED,
Yoonsang Lee, Jehee Lee.

    - US Registration, 09336182, 2016/5/10.

APPARATUS AND METHOD FOR CONTROLLING A DATA-BASED BIPED,
Yoonsang Lee, Jehee Lee.

    - Europe(EP) Pending, 2594374, 2013/5/25.

DATA-DRIVEN BIPED CONTROL APPARATUS AND METHOD,
Yoonsang Lee, Jehee Lee.

    - Korea Registration, 10-1200191, 2012/11/5.