Minsuk Chang

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Research Interests

Building interfaces to understand and expand learning capabilities of ours and machine's by using techniques in *interactive systems (HCI)* and *statistical inferences (ML) on large scale interaction data* with naturally crowdsourced tutorials and instructions.

Education

Korea Advanced Institute of Science and Technology (KAIST), Daejeon, South Korea 2014 Mar -

PhD in Computer Science, Advisor: Juho Kim

Rutgers, The State University of New Jersey, New Brunswick, NJ, USA 2012 - 2014

MSc in Statistics

KAIST Business School, Graduate School of Finance, Seoul, South Korea 2009 - 2011
MSc in Finance with specialization in Financial Engineering, Advisor: Jangkoo Kang
Thesis Title: An Empirical Study on the Existence of Momentum Profits in Asian Stock Markets
- 2011 Best Thesis Award

Simon Graduate School of Business, University of Rochester, Rochester, NY, USA 2010
MSc in Finance - Dual Degree Program with KAIST Business School

Korea Advanced Institute of Science and Technology (KAIST), Daejeon, South Korea 2003 - 2008
BSc in Computer Science

Selected Publications

Minsuk Chang, Anh Truong, Oliver Wang, Maneesh Agrawala, Juho Kim. "*How to Design Voice Based Navigation for How-To Videos"* Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, 2019. To appear.

Minsuk Chang, Leonore V. Guillain, Hyeungshik Jung, Vivian M. Hare, Juho Kim, and Maneesh Agrawala. "*RecipeScape: An Interactive Tool for Analyzing Cooking Instructions at Scale"* Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, 2018

Minsuk, Chang Vivian M. Hare, Juho Kim, and Maneesh Agrawala. "*RecipeScape: Mining and Analyzing Diverse Processes in Cooking Recipes."* In Proceedings of the 2017 CHI Conference Extended Abstracts on Human Factors in Computing Systems, 2017

Employment

Autodesk Research, Toronto, ON, Canada 2018 Nov –

User Interface Research Intern, User Interface Group
- Investigating techniques for modeling the higher-level skills associated with feature-rich software applications.
- Building systems and interfaces for fostering skill development at scale in the wild.

Adobe Research, Seattle, WA, USA 2018 Jun - Sept

Summer PhD Intern, Creative Intelligence Lab
- Building novel interaction techniques for video interfaces.
- Understanding and designing voice user interactions for learning with how-to videos.

Coastal Management LLC, New York, NY, USA 2012 - 2013

Primary Role: Quant Research
- Researching, modeling and developing alpha generation strategies for arbitrage trade (US Equity)
- Researching trading signals in statistical arbitrage and index arbitrage models, high-mid frequency models.

KAIST Artificial Intelligence and Pattern Recognition Lab, Daejeon, South Korea 2008
Undergraduate Research Intern - Advisor: Professor Jin-Hyung Kim
Topics in Pattern Recognition for Motion Pictures (Live Video Stream)
Designed and implemented a real-time program that reads the video input of a canoe race and outputs race result.
Project sponsored by the Korea Canoe Federation.

KAIST Artificial Intelligence and Pattern Recognition Lab, Daejeon, South Korea 2007
Undergraduate Research Intern - Advisor: Professor Kee-Eung Kim
Topics in Multiple View Geometry in Computer Vision, Pattern Recognition
Designed and implemented algorithms that recognizes features points in images and detects specific objects in multiple images.

Teaching

Korea Advanced Institute of Science and Technology (KAIST), Daejeon, South Korea 2015 – 2018
Head Teaching Assistant
- CS101 Introduction to Programming

Rutgers, The State University of New Jersey, New Brunswick, NJ, USA 2012 - 2012
Teaching Assistant, Financial Statistics and Risk Management Program
- FSRM588 Financial Data Mining
- FSRM587 Advanced Simulations Methods for Finance

Academic Services

Program Committee (Meta-Review)
CHI 2019 LBW

Reviewer
CHI 2017, 2018, 2019
CSCW 2018
UIST 2017, 2018

Student Volunteer
CHI 2017
UIST 2017, 2018