# Seongtaek Lim

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#### Education

## **Cornell University**

PhD in Information Science Minor in Computer Science Aug 22 2016 - Aug 19 2019 New York, NY

## **UC** Berkeley

PhD Student in Information Science Transferred out with my advisor Aug 22 2012 - Aug 21 2016 Berkeley, CA

## **Yonsei University**

MS in Cognitive Engineering Human-Computer Interaction Mar 2 2007 - Feb 23 2009 Seoul, South Korea

## **Yonsei University**

BS in Computer Science Mar 3 2003 - Feb 26 2007 Seoul, South Korea

## Skills

## Programming / Software

C/C++/C# • Java • Python • HTML • JavaScript • CSS • PHP • Perl • LISP • Pig • SQL • NoSQL • MySQL • PostgreSQL • MongoDB • Git

#### **Libraries & Frameworks**

TensorFlow • Scikit-learn • Scipy • Pandas • Numpy • Django • Flask • Tornado • React.js • Backbone.js • D3.js • Node.js • Express.js • Webpack • Mongoose

#### **Techniques**

Full-stack development • Machine learning • Deep learning • Natural language processing • Data visualization • Statistical analysis

#### Stat / BI Tools

R • SPSS • Tableau

#### Relevant Coursework

- Data Mining and Analytics
- Analyzing Big Data with Twitter
- Cutting-Edge Web Technology
- Information Visualization and Presentation
- Applied Natural Language Processing
- Causal Inferences and Design on Experiments

#### Doctoral Research

**Cornell University** Software Designs to Support User Collaboration My research has largely focused on software development and research on the impacts of software designs on users behaviors. I build novel interactive software tools for collaboration, data collection, and data analysis. I'm the creator of GLIDE, MOOCchat, Farmview, CoHeadline, and WordToRI.

#### Patent

• H. Ko, Kim, J., H. Park, D. Kang, Park, C., Lim, S., Cha, S. Y., H. Cho, System for Tangible Broadcasting and Control Method using the Same, 10-1076691, Oct. 2011

# Work Experience

### Adobe Full Stack Software Engineer IV

Sep 16 2019 - Present | 345 Park Ave, San Jose, CA 95110

- Integration of user engagement solutions with AI-powered consumer product of the company (project Phylo)
- Development of web-based analytics / data generation software for internal purpose  $\,$
- Development of and analysis on web-based and mobile applications for endusers

#### **ProPublica** Research Fellow at Civic News Lab

Jun 20 2016 - Aug 19 2016 | 155 6th Ave 13th Floor, New York, NY 10013

- Development of a data collection software for data-driven journalism
- Development of a browser extension visualizing A/B testing in online journalism
- Work published in ProPublica's third episode of Breaking the Black Box series (https://www.propublica.org/article/breaking-the-black-box-when-machines-learn-by-experimenting-on-us)

### Fuji Xerox Palo Alto Laboratory Research Intern

May 26 2014 - Aug 15 2014 | 3174 Porter Dr, Palo Alto, CA 94304

- Topic modeling of dynamic temporal ranges of documents using LDA
- · Development of a data visualization tool for exploratory analysis
- Work published in ACM conferences CSCW15 and IUI16

# **KAIST Institute for Information & Electronics Research** Military Service Exempted Research Scientist

Mar 9 2009 - Mar 30 2012 | 335 Gwahangno, Yuseong-gu, Daejeon, South Korea

- Worked on social computing and human-computer interaction research
- Work published in international journals IJHCS and CHB

Selected Project Experience (More can be found at https://stlimo730.github.io/)

**GLIDE**; **Git-Learning IDE** Developed and deployed a web-based IDE designed toward systematic collaboration process according to triangular workflow of Git for novice users' web programming practice. The scaffolding design helped the users' task performance.

(Django / Python / React.js / JavaScript / GitHub API / Nginx)

**DeepProspect** Collected and analyzed 230k+ season records for MiLB data and 96k+ season records for draft data using deep learning and support vector machine to predict promising players among the current young players. Shared the results with Boras Corporation, the largest sports agency in the world. (TensorFlow / Scikit-learn / Pandas / Scipy / BeautifulSoup / Python)

MOOCchat Developed and deployed a web-based real-time group formation and discussion tool for online education platforms (MOOCs). The design of the software implemented collaborative learning in an isolated context. (Node.js / Express.js / AJAX / JavaScript / HTML / CSS)

**VirtualStadium** Developed a social media where users watch sports games while interacting with each other through gesture-based communication channels. (Java / Tomcat / Python / JavaScript / HTML / CSS)

## Awards

## Google

Research Grant

Social Interactions Focused Program 2012

## **Cornell University**

Research Assistantship 2016 - 2019

## **UC Berkeley**

Research Assistantship 2012 - 2014

## **UC** Berkeley

Teaching Assistantship 2014 - 2015

## References

### Tapan Parikh, PhD

Associate Professor Information Science Cornell University tsp53@cornell.edu

## Patrick Chiu, PhD

Principal Research Scientist Fuji Xerox Palo Alto Laboratory chiu@fxpal.com

## Jinwoo Kim, PhD

Professor Graduate Program in Cognitive Science Yonsei University jinwoo@yonsei.ac.kr

#### Inseong Lee, PhD

Assistant Professor School of Business Kyungil University inseong.lee@gmail.com

#### Kwangyun Wohn, PhD

Emeritus Professor Graduate School of Culture Technology wohn@kaist.ac.kr KAIST

## Leadership Activities

#### Social Chair

PhD students organization at Cornell Tech (PACT)

#### **Observation Dept Chair**

Yonsei Amateur Astronomical Association (YAAA)

## **Publications**

- Lim, S., Varanasi, R., & Parikh, T. (2018). GLIDE (Git-Learning IDE): In-class collaboration in web engineering curriculum for youths. *In Proceedings of the 49th ACM Technical Symposium on Computer Science Education (SIGCSE '18). ACM*.
- Chen, F., Chiu, P., & Lim, S. . (2016). Topic Modeling of Document Metadata for Visualizing Collaborations over Time. *In Proceedings of the 21st International Conference on Intelligent User Interfaces (IUI '16). ACM.*
- Lim, S., & Chiu, P. (2015). Collaboration Map: Visualizing Temporal Dynamics of Small Group Collaboration. In Proceedings of the 18th ACM Conference Companion on Computer Supported Cooperative Work & Social Computing (CSCW '15). ACM.
- Coetzee, D., Lim, S., Fox, A., Hartmann, B., & Hearst, M. A. (2015). Structuring interactions for large-scale synchronous peer learning. *In Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing (CSCW '15)*. ACM.
- **Lim, S.**, Coetzee, D., Hartmann, B., Fox, A., & Hearst, M. A. (2014). Initial experiences with small group discussions in MOOCs'. *In Proceedings of the first ACM conference on Learning*@ scale conference (L@S '14). ACM.
- Lim, S., Cha, S. Y., Park, C., Lee, I., & Kim, J. (2012). Getting closer and experiencing together: Antecedents and consequences of psychological distance in social media-enhanced real-time streaming video. *Computers in Human Behavior*, 28(4), 1365-1378.
- Lim, S., Cha, S. Y., Park, C., Lee, I., & Kim, J. (2011). Idioculture in crowd computing: A focus on group interaction in an event-driven social media system. *International Journal of Human-Computer Studies*, 69(10), 632-646.
- Lim, S. (2009). Co-experience: Enhancing the interactive experience of social media users through tangible interaction. *Master's Thesis*, *Yonsei University*.
- Lim, S., Park, C., Cha, S. Y., Moon, J., Lee, I., & Kim, J. (2009). The role of event-driven social media and dynamic sports broadcasting system as crowd computing media. Crowd-Computer Interaction Workshop in the 27th International Conference on Human Factors in Computing Systems (CHI '09). ACM.
- Yang, S., Lim, S., Lee, I, Lee, S., & Kim, J. (2008). A study on interaction factors influencing use intention of interactive video service: Focusing on media synchronicity. *In Proceedings of the Seventh Annual Workshop on HCI Research in MIS (Pre-ICIS '08)*.

# **Teaching Experience**

# **Information Technology High School** Guest Lecturer

Oct - Nov 2018 | Queens, NY

- · Web front-end programming with HTML, CSS, and JavaScript following Git workflow
- · High school seniors

## **UC Berkeley** Teaching Assistant

Fall 2014 - Spring 2015 | Berkeley, CA

- Data Structure and Algorithms course
- Master of Information and Data Science program in School of Information