

# Loni Hagen

Assistant Professor of Data Science,  
University of South Florida

School of Information,  
4202 E. Fowler Ave, CIS 1040,  
Tampa, FL 33620-8100  
PH: (518) 569-1687  
EMAIL: lonihagen@usf.edu

## EDUCATION

---

- 2011– 2016 Ph.D. Information Science, University at Albany SUNY  
Specialization: Information, Government, and Democratic Society  
**Dissertation title:** “Topic Modeling for E-petition Content Analysis: Interpreting Petitioners’ Policy Priorities”  
**Dissertation committee:** Teresa M. Harrison (co-chair), Özlem Uzuner (co-chair), S. S. Ravi, and Luis F. Luna-Reyes
- 2004 – 2005 Ph.D. course work, Information Studies (specialized in Information Law), University of Tokyo, Tokyo, Japan. **Adviser:** Junichi Hamada
- 2002 – 2004 M.A.S. Information Studies (specialized in Information Law), University of Tokyo, Tokyo, Japan. **Adviser:** Junichi Hamada  
**Thesis title:** “Privacy Protection Policy in the Information Age: An Analysis of the Korean National Identity Registration System”
- 1999 – 2003 M.A. Advertising and Public Relations, Yonsei University, Seoul, Korea. **Adviser:** Joo Hwan Kim.
- 1996 B.A., Law, Korean National Police University, A-san Si, Korea  
*A highly selective university. Acceptance rate (female student): 0. 4% (2015)*

## HONORS AND AWARDS

---

- 2017 Distinguished Dissertation Award, University at Albany SUNY, College of Engineering and Applied Science

## ACADEMIC/RESEARCH APOINTMENT

---

- 2016– Present **Assistant Professor**, University of South Florida  
**Area of research:** Use of computational techniques for policy decision making  
**Teaching:** Introduction to Data Science, Information Analytics, Introduction to Data & Text Mining, Predictive Analytics

- 2013 – Present Guest researcher, International Cybercrime Research Center, Korean National Police University, A-san Si, Korea
- 2014 – 2015 Graduate Research Assistant for *Project Petition*, Collaborative and multidisciplinary research project to develop a grant proposal for National Science Foundation, SUNY Albany
- 2004 – 2005 Assistant Policy Analyst, Mitsubishi Research Institute, Tokyo, Japan

## PUBLICATIONS

---

### Refereed Journal Article:

- 2017 Jun, D., Kim, D., & **Hagen, L.**, The Impact of Mobile Social Media Use on User's Emotional Status, *Journal of the Korean Association for Regional Information Society*, 20(2)002, written in Korean (In Press).
- 2017 **Hagen, L.**, Keller, T., Neely, S., DePaulo, N., & Cooperman, C., "Crisis Communications in the Age of Social Media: A Network Analysis of Zika Related Tweets." *Social Science and Computer Review*, **Impact factor: 2.293** (In Press).
- 2016 Hagen, L., Harrison, T. M., Uzuner, Ö., May, W., Fake, T., & Katragadda, S. E-petition popularity: Do linguistic and semantic factors matter? *Government Information Quarterly*, 33(4), 783–795, **Impact factor: 4.090**
- 2015 Dumas, C., LaManna, D., Harrison, T. M., Ravi, S.S., Kotfila, C., Gervais, N., **Hagen, L.**, & Chen, F. "Examining Political Mobilization of Online Communities through E-petitioning Behavior in We the People," 2015. *Big Data and Society Journal*.

### Invited Journal Articles:

- 2005 **Kim, Yong Lan<sup>1</sup> [Hagen, L.]**, "A Study of a Proposed Amendment to Japanese Criminal Law in Response to the Convention on Cyber Crime" (in Korean), *Police Science Research*, Vol. 19:381-420.
- 2004 **Kim, Yong Lan [Hagen, L.]**, "An Introduction to the Korean Public Information Act and the 2004 Amendment" (in Japanese). *Public Information Quarterly*. Vol. 13: 56-61. Reprinted in *Public Information Acts in Foreign Countries* (Tokyo: Shineisya), pp. 32-42.

### Book Chapters:

- 2017 Dumas, C., Harrison, T. M., **Hagen, L.**, & Zhao, X. (2017). What Do the People Think?: E-Petitioning and Policy Decision Making. In A. A. Paulin, L. G.

---

<sup>1</sup> This is my maiden name.

Anthopoulos, & C. G. Reddick (Eds.), *Beyond Bureaucracy* (pp. 187–207). Springer International Publishing. ISBN: 978-3-319-54141-9; 978-3-319-54142-6 [https://doi.org/10.1007/978-3-319-54142-6\\_12](https://doi.org/10.1007/978-3-319-54142-6_12)

- 2017 **Hagen, L.**, Harrison, T. M., Dumas, C., “Text Analytics for Policy Analysis,” **Book chapter** for *Policy Analytics, Modelling, and Informatics: Innovative Tools for Solving Complex Social Problems*, Springer (Accepted).

#### Refereed Conference Proceedings:

- 2017 **Hagen, L.**, “Overcoming the Privacy Challenges of Wearable Devices: A Study on the Role of Digital Literacy,” In *Proceedings of the 18th Annual International Conference on Digital Government Research*, June. 7-9, New York, NY
- 2015 **Hagen, L.**, Harrison, T. M., Uzuner, Ö., Fake, T., LaManna, D., & Kotfila, C. “Introducing Textual Analysis Tools for Policy Informatics: A Case Study of E-petitions.” In *Proceedings of the 16th Annual International Conference on Digital Government Research*, May 27-30, 2015, Phoenix, AZ.
- 2015 **Hagen, L.**, Uzuner, Ö., Kotfila, C., Harrison, T. M., & Lamanna, D. “Understanding Citizens’ Direct Policy Suggestions to the Federal Government: A Natural Language Processing and Topic Modeling Approach.” In *Proceedings of the 2015 48th Hawaii International Conference on System Sciences (HICSS)*, January 5-8, 2015, Kauai, HI.
- 2015 Dumas, C., LaManna, D., Harrison, T. M., Ravi, S. S., **Hagen, L.**, Kotfila, C., & Chen, F. “E-petitioning as collective political action in We the People.” *The iConference*, March 24-27, 2015, Newport Beach, CA.
- 2013 **Hagen, L.** “Enterprise System Implementation in National and Local Korean Police Agencies: A Case Study.” In *Proceedings of the 14th Annual International Conference on Digital Government Research* (pp. 46–55), June 17-20, 2013, Quebec City, Quebec, CA.

#### Manuscripts in Preparation:

Yoon, J., **Hagen, L.**, Andrews, J., Scharf, R., Keller, T., & Chung, E., Impact of Multimedia Tweets in Health Communications: An analysis of Tweets on Zika Virus. Manuscript in preparation for submission to the *Journal of the American Society for Information Science and Technology*.

## INVITED TALKS

- 2015 Guest lecture: “Patterns and Contents of Online Citizen Participation: Text Mining Approach,” Policy Informatics course in Graduate School of Public Administration, Seoul National University, Korea (via Skype)

2015 “Natural Language Processing and Topic Modeling,” Burlington Data Scientists meeting, Burlington, VT

## CONFERENCE ACTIVITY/PARTICIPATION

---

### Track Chair:

2017 **Hagen, L.**, Kwon, H.Y., Sung W.J., & Chun, S.A. “Cybersecurity and Government,” *Digital Government Conference*, June 7-9, 2017, New York, NY.

### Panels and Sessions Organized:

2017 Taylor, N.G., **Hagen, L.**, Bashir, M., Dincelli, E., & Unsworth, K., “Wearable Devices: Information Privacy, Policy, and User Behavior,” **Panel**, *The Association for Information Science and Technology*, Oct. 28 – Nov. 1, Washington D.C. (Crystal City, Virginia), USA

2016 Sung W.J., **Hagen, L.**, & Chun, S.A. “Cyber Security in Korea and US: State-of-the-art Policies and Future Collaboration,” **Symposium**, June 13, 2016, Seoul, Korea

2016 **Hagen, L.**, Sung W.J & Chun, S.A. “Cyber Security in Governments around the World: Initiatives and Challenges,” **Workshop**, *Digital Government Conference*, June 8-10, 2016, Shanghai, China

2016 Vasquez, F., **Hagen, L.**, & Lee J. “e-Participation: Systems, Actors, Policy and Research,” **Sessions for Interaction and Engagement**, *iConference—Partnership with Society*, March 20-23, 2016, Philadelphia, PA.

2015 **Hagen, L.**, Kropczynski, J., Dumas, C., Lee J., Vasquez, F., & Rorissa, A., “Emerging Trends in the Use and Adoption of E-participation Around the World,” **Panel**, *The Association for Information Science and Technology—Information Science with Impact: Research in and for the Community*, November 6-10, 2015, St. Louis, Missouri

2013 **Hagen, L.**, DePaula, N., Dincelli, E., Caidi, N., & Rorissa, A. “Electronic Government around the World: Current Trends and Future Prospects.” **Panel**, *The Association for Information Science and Technology—Beyond the Cloud: Rethinking Information Boundaries*, November 1-6, 2014, Montreal, Canada

### Presentations:

2016 “E-Petition Popularity: Do Linguistic and Semantic Factors Matter?” In the *Interdisciplinary Data Sciences Consortium*, University of South Florida

- 2016 **Hagen, L.**, “e-People, the Korean E-petitioning System.” In the panel, “Petitioning East and West: Historical Forms of Participation with Contemporary Application to Digital Government,” In the *17th Annual International Conference on Digital Government Research*, June 10, 2016, Shanghai, China.
- 2015 **Hagen, L.**, “Topic Modeling for E-petition Analysis: Interpreting Petitioners’ Policy Priorities.” In the panel, “Emerging trends in the use and adoption of e-participation around the world,” In the *2015 Annual Meeting of the Association for Information Science and Technology—Information Science with Impact: Research in and for the Community*, Nov. 6-10, 2015, St. Louis, Missouri.
- 2015 **Hagen, L.**, “Automatic Description of Textual Big Data: A Case Study of Electronic Petitions.” In the panel, “New Approaches to Textual Analysis in E-Government Research.” In the *16th Annual International Conference on Digital Government Research—Digital Government and Wicked Problems*, May 27-30, 2015.
- 2014 Dumas, C., LaManna, D. Harrison, T.M., Ravi, S.S., Kotfila, C., Gervais, N., **Hagen, L.**, & Chen, F. “Examining Political Mobilization of Online Communities through E-Petitioning Behavior in We The People.” (extended abstract) Presented at the Social Media & Society Conference, July 27-29, 2014, Toronto, CA.
- 2013 **Hagen, L.**, “Government 3.0 of South Korean Government: What has been Achieved?” In the panel, “Electronic Government around the World: Current Trends and Future Prospects.” In the *2013 Annual Meeting of the Association for Information Science and Technology—Rethinking Information Boundaries*, Nov. 1-3, 2015, Montreal, CA.
- 2004 **Kim, Yong Lan [Hagen, L.]**, “The Right to Privacy: A Comparison of Perspectives Expressed in Korean, Japanese and American Law” (presented in English). *8<sup>th</sup> Asian Studies Conference Japan, Sophia University*, June 19, 2004, Tokyo, Japan.

#### Refereed Posters:

- 2017 **Hagen, L.**, Keller, T., Scharf, R., Yoon, J., Andrews, J., & Chung, E. “Impact of Multimedia Tweets in Health Communications: An analysis of Tweets on Zika Virus.” In the ALISE 2017. Jan. 17-20, Atlanta, GA.
- 2016 **Hagen, L.** “Topic Modeling for E-petition Analysis: Interpreting Petitioner’s Policy Priorities.” In the ALISE 2016—Doctoral Student Poster Competition, Jan. 5-8, Boston, MA.
- 2015 **Hagen, L.**, Harrison, T. M., & Uzuner, Ö. “Topic Modeling for E-petition Analysis.” In the 37<sup>th</sup> APPAM Fall Research Conference—The Golden Age of Evidence-Based Policy, Nov. 12-14, 2015, Miami, FL.

- 2012 **Hagen, L., & Sinn, D.** “Enterprise Systems and Government Organizational Changes: A Socio-materiality Analysis.” In *Proceedings of the 6th International Conference on Theory and Practice of Electronic Governance* (pp. 470–471).

**Workshop attendance:**

- 2017 E-Discovery Project, University of Florida Law School, Feb. 20, Florida
- 2016 Privacy and Language Technologies, AAAI 2016 Fall Symposium Series, Virginia
- 2015 Big Data and Public Policy Workshop, November 11, Miami, Florida
- 2015 Sentiment Analysis Symposium, July 15-16, New York, NY
- 2014 Machine Learning with MATLAB, May 1, Albany, NY
- 2014 Team Based Learning Academy, January 10, Albany, NY

## TEACHING

---

**Instructor:**

- 2016-present *Introduction to Data Science, Information Analytics, Introduction to Data & Text Mining, Predictive Analytics*, School of Information, University of South Florida (17 students)
- 2014 *Current Topics in Social Media*, Developed and taught a new course focused on social media analytics, Informatics Department, SUNY Albany (28 students, one semester)
- 2013 *Web Technologies*, Informatics Department, SUNY Albany (21 students, two semesters)
- 1998 – 2001 Developed and taught several courses, such as *Police Public Relations, Police Wireless Communication Systems*, and *Intensive Japanese*. Police Comprehensive Academy, In-cheon Si, Korea

**Teaching Assistant:**

- 2011 – 2012 Teaching Assistant: (1) *IT Fundamentals*, (2) *Information policy & management*, Informatics Department, SUNY Albany

## GRANT

---

- 2017 Submitted an executive summary (PI: Dr. Kwang-Cheng Chen, Co-PI: Loni Hagen), BAA Number: DARPA-BAA-16-46, DARPA, “Inference and Control of Online Social Dynamics and Human Society,” Pending

- 2017 CAS Internal Seed Funding Program, “How Improving Digital Literacy Related to Wearable Devices Impacts User Decisions Regarding Privacy,” \$5,000, Not funded.
- 2017 FC2 Collaborative Seed Program, “Automatic Detection of Vague Content in Privacy Policies Using Natural Language Processing and Deep Learning Techniques,” \$50,000, Not funded.
- 2016 Russell Sage Foundation’s special initiative on Computational Social Science, “Which Words Matter? A Text Analytics Classification Model for E-Petitions,” Letter of Inquiry—Declined.
- 2015 Contributions to an NSF proposal (PI: Dr. Teresa M. Harrison), Not funded  
 (1) Finished a multivariate analysis to identify linguistic and semantic predictors to petition popularity, (2) provided a preliminary result of demographic characteristics of e-petition signers in the US, and (3) participated in agenda-setting theory discussion group.
- 2014 Contributions to an NSF proposal (PI: Dr. Teresa M. Harrison), Not funded  
 (1) Provided performance test results regarding the two best performing named entity recognition systems, (2) devised relevant linguistic features for organizing electronic petitions, and (3) conducted a preliminary multivariate analysis to identify factors that contribute to petition popularity.

## PROFESSIONAL WORK EXPERIENCE

---

- 2015 Consultant, Data mining and business analytics, DoubleU Games, Seoul, Korea
- 2015 Consultant, Natural language processing, A Health Adventure, Burlington, Vermont
- 2012 –2016 Police Officer, Korean National Police Agency, Seoul, Korea
- 2011 Police Performance Management Specialist: Lieutenant, Mapo Police Station, Seoul, Korea
- 2005 – 2006 Policy Analyst, Information Resource Specialist and e-Government homepages, Sexual Harassment Policy Specialist, Executive Secretary for the Commissioner’s wife, Headquarters of the Korean National Police Agency, Seoul, Korea
- 1996 – 1997 Officer in Charge: Sub-station, Criminal Investigator: Lieutenant, Kuro Police Station, Seoul, Korea

## HONORS AND AWARDS

---

- 2015      Doctoral Colloquium (invited), The Annual International Conference on Digital Government Research (\$200)
- 2014-5    University at Albany Graduate Student Organization Professional Development Awards for presenting research papers at two conferences (\$195, \$450)
- 2013      New York State Graduate Student Employees Union Professional Development Awards (\$442)
- 2006      Commissioner's Award for Outstanding Work as an Information Management Specialist, Headquarters of the Korean National Police Agency, Seoul, Korea
- 2001 – 2004    Long-term Abroad Scholarship for Public Servants—**Granted to one national police officer per year** by the Korean government—in support of studies at the University of Tokyo, Japan (\$100,000.00)
- 2000      Commissioner's Award for Excellence in Teaching, Police Comprehensive Academy, In-cheon Si, Korea
- 1998      Principle's Award for Excellence in Teaching Technique, Police Comprehensive Academy, In-cheon Si, Korea

## SERVICE AND PROFESSIONAL ACTIVITIES

---

- 2014 – 2017    Reviewer—Government Information Quarterly, Information Polity, International Journal of E-Planning Research
- 2014 – 2015    SIG III Mentorship coordinator, ASIS&T
- 2014          Doctoral Student Representative, Faculty Search Committee, Informatics Department, SUNY Albany
- 2012          Organizer, 8<sup>th</sup> New Trends in Computer and Information Research Conference, SUNY Albany
- 2001          Administrative Vice President, Police College Alumni Charity Group, Seoul, Korea
- 1999 – 2000    Administrative Vice President, Classmates Association of the Graduate School of Journalism and Mass Communication, Yonsei University, Seoul, Korea
- 1998 – 2001    Founder and Administrative Vice President, Police College Female Alumni Group, Seoul, Korea



## PROFESSIONAL ASSOCIATIONS

---

Association for Library and Information Science Education (ALISE)  
American Society for Information Science and Technology (ASIS&T)  
Association for Public Policy Analysis & Management (APPAM)  
Korean International Cybercrime Research Group  
Digital Government Society (DGO)  
iConference

## LANGUAGES

---

Japanese and English: Fluent; Korean: Native