Curriculum Vitae

Kahyun Choi

Postal Address # 329 The Graduate School of Library and

Information Science 501 E. Daniel Street,

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Research Interests

Song lyrics analysis

- Subject detection and topic modeling from the user interpretations of the lyrics, which are available as a form of social/crowdsourced data
- Web user opinion analysis

Audio music classification

- Audio features for mood classification

Metadata

- Crowdsourced music annotation
- Cross cultural differences in the music moods and genres

Evaluations of Music Information Retrieval (MIR) systems

- Community-driven system-centered evaluation
- User-centered user experience evaluation

Informetrics study

Social network analysis on co-authorship networks

Education

University of Illinois at Urbana-Champaign

- PhD in Library and Information Science
- From Aug. 2011 (currently pursuing)
- Proposed dissertation: Computational Lyricology: Quantitative Approaches to Understanding Song Lyrics and Their Interpretations
- Advisor: Professor J. Stephen Downie

Korea Advanced Institute of Science and Technology (KAIST), Daejeon, Korea

Master of Science in Digital Media Program

- Feb. 2006 ~ Jan. 2010
- Thesis: Performance Improvement of Music Mood Classification Using Hyper Music Features
- Advisor: Professor Minsoo Hahn

Ajou University, Suwon, Korea

- Bachelor of Engineering in Information and Computer Engineering,
- Mar. 2000 ~ Feb. 2005

University of Illinois at Chicago

- Exchange Student in the Department of Computer Science
- Fall semester, 2004

Work Experience

Co-Instructor

- Graduate School of Library and Information Science, University of Illinois at Urbana-Champaign
- Aug. 2016 ~ Dec. 2016
- Digital Libraries (LIS560LE)

Research Assistant

- Graduate School of Library and Information Science, University of Illinois at Urbana-Champaign
- Aug. 2011 ~ Aug. 2016
- Projects: Music Information Retrieval Evaluation eXchange (MIREX), K-Pop Mood/Genre Annotation, HathiTrust Research Center (HTRC)

Teaching Assistant

- Graduate School of Library and Information Science, University of Illinois at Urbana-Champaign
- 2013 ~ 2017 Digital Libraries (LIS560LE)

Software Developer

- Naver Corp.
- Jan. 2009 ~ Jun. 2011
- Member System Development Team

Software Developer (Internship)

- Jun. 2007 ~ Jul. 2007
- Postvisual

Publications

- Anders Friberg, Ragnar Schön, Anders Elowsson, <u>Kahyun Choi</u>, and J. Stephen Downie, "Cross-cultural aspects of perceptual features in K-Pop: A pilot study comparing Chinese and Swedish listeners," in Proceedings of the 43rd International Computer Music Conference, (ICMC), 2017

- Xiao Hu, Kahyun Choi, Yun Hao, Sally Jo Cunningham, Jin Ha Lee, Audrey Laplante, David Bainbridge, and J. Stephen Downie, "Exploring the Music Library Association Mailing List: A Text Mining Approach", in Proceedings of the 18th International Society for Music Information Retrieval Conference, (ISMIR), 2017
- Kahyun Choi, Jin Ha Lee, Xiao Hu, and J. Stephen Downie, "Music Subject Classification Based on Lyrics and User Interpretations", Proceedings of the American Society for Information Science and Technology (ASIS&T), 2016
- Xiao Hu, Kahyun Choi, Jin Ha Lee, Audrey Laplante, Yun Hao, Sally Jo Cunningham and J. Stephen Downie, "WiMIR: An Informetric Study on Women Authors in ISMIR", in Proceedings of the 17th International Society for Music Information Retrieval Conference, (ISMIR), 2016
- Yun Hao, Kahyun Choi, and J. Stephen Downie, "Exploring J-DISC: Some <u>Preliminary Analyses</u>", in Proceedings of the 3rd International Digital Libraries for Musicology workshop (DLfM), 2016.
- Xiao Hu, Kahyun Choi, J. Stephen Downie, "A Framework for Evaluating <u>Multimodal Music Mood Classification</u>", Journal of the Association for Information Science and Technology, 2016
- Xiao Hu, Jin Ha Lee, David Bainbridge, Kahyun Choi, Peter Organisciak, and J. Stephen Downie, "The MIREX Grand Challenge: a framework of holistic user experience evaluation in music information retrieval", Journal of the Association for Information Science and Technology, 2015
- Jin Ha Lee, Xiao Hu, Kahyun Choi, and J. Stephen Downie, "MIREX Grand Challenge 2014 on User Experience: Qualitative analysis of user feedback", in Proceedings of the International Society for Music Information Retrieval Conference, (ISMIR), 2015
- Kahyun Choi, Jin Ha Lee, Craig Willis, J. Stephen Downie, "Topic Modeling Users' Interpretations of Songs to Inform Subject Access in Music Digital Libraries", In Proceedings of the IEEE/ACM Joint Conference in Digital Libraries (JCDL), 2015
- J. Stephen Downie, Xiao Hu, Jin Ha Lee, Kahyun Choi, Yun Hao, and Sally Jo. Cunningham, "Ten Years of MIREX (Music Information Retrieval Evaluation eXchange): Reflections, Challenges and Opportunities", in Proceedings of the International Society for Music Information Retrieval Conference, (ISMIR), 2014
- Xiao Hu, Jin Ha Lee, Kahyun Choi, and J. Stephen Downie, "A Cross-Cultural Study on the Mood of K-POP Songs", in Proceedings of the International Society for Music Information Retrieval Conference, (ISMIR), 2014
- Kahyun Choi, Jin Ha Lee, and J. Stephen Downie, "What is this song about anyway?: Automatic classification of subject using user

- interpretations and lyrics", In Proceedings of the IEEE/ACM Joint Conference in Digital Libraries (JCDL), 2014
- Jin Ha Lee, Kahyun Choi, Xiao Hu, and J. Stephen Downie, "K-Pop Genres: A Cross Cultural Exploration", in Proceedings of the International Society for Music Information Retrieval Conference, (ISMIR), 2013.

Presentations

Doctoral Colloquia

- Music Thumbnailing, 2016 Annual Meeting of the Association for Information Science and Technology (ASIS&T) Doctoral Colloquium, Copenhagen, Denmark, Oct. 18, 2016.
 - · Travel grant (\$200) and registration fee waiver
- From Lyrics to Their Interpretations: Automated Reading between the Lines, the IEEE/ACM Joint Conference in Digital Libraries (JCDL) Doctoral Consortium, 2015
 - · Travel grant to cover the cost of travel, lodging, and registration fees

Talks

- Information Retrieval, Digital Libraries (LIS560LE), Spring 2015.
- Automatic Music Subject Classification and a Cross-Cultural Exploration of K-Pop Genre, Shazam, Menlo Park, CA, Aug. 14, 2014.
- A Cross-Cultural Study on the Mood and Genre of Korean Pop Songs, Pandora Radio, Oakland, CA, Jun. 19, 2014.
- A Cross-cultural Exploration of K-Pop Moods and Genres, KTH Royal Institute of Technology, Sweden, May 3, 2014 - May 9, 2014.

Posters

- Topic Modeling Users' Interpretations of Songs to Inform Subject Access in Music Digital Libraries, GSLIS Research Showcase 2015
- The Impact of Music Genre on Music Similarity: A Qualitative Exploration, GSLIS Research Showcase 2015
- Exploring Music Subject Classification Based on User Interpretations of Music, Midwest Music Information Retrieval Gathering (MMIRG), Evanston, IL, Jun. 14, 2014.
- K-Pop Genres: A Cross Cultural Exploration, GSLIS Research Showcase 2014
- Exploiting Structural Data for Music Exploration, GSLIS Research Showcase 2013
- Music Mood Tag Prediction with Dimension Reduced Tag Space, GSLIS Research Showcase 2013
- HathiTrust Research Center: New Frontiers in Digital Scholarship, GSLIS Research Showcase 2013

Awards

- Women in Music Information Retrieval (WiMIR) Award, ISMIR, 2016
 - · Housing and registration fees waiver

Honors and Scholarships

Merit based university scholarships for four semesters

- Department of Information and Computer Engineering, Ajou University, Suwon, Republic of Korea
- Spring 2004, fall 2003, spring 2002, fall 2001

Graduated with honors

 Department of Information and Computer Engineering, Ajou University, Suwon, Republic of Korea

Skills

- Programming languages: Matlab, JavaScript, Python, R, Java, C, PHP, C with PIC
- Linux, NLP tools, scikit-learn, Mallet, NodeXL, Dedoose, Weka, and Amazon MTurk

Professional Activities

Research Community Work

- The Music Information Retrieval Evaluation eXchange (MIREX), Evaluation Committee member, (Aug. 2011 - Aug. 2016)

As a reviewer of journals and conferences

- The International Society for Music Information Retrieval Conference (ISMIR)
- ACM Transactions on Intelligent Systems and Technology (TIST)
- The American Society for Information Science and Technology (ASIS&T)
- International Journal on Digital Libraries (IJDL)