

JONG WOOK KIM

31-58 44th st. Astoria NY 11103

☎(+1) 203-747-6860 | ✉jongwook@nyu.edu | 🏠jongwook.kim | 📱jongwook | 🌐jongwook-kim

Employment

Pandora Internet Radio

Oakland, CA

RESEARCH SCIENTIST INTERN IN MUSIC INFORMATION RETRIEVAL

Jun 2017 - Aug 2017

- Developed a recommender system using listener embeddings obtained by aggregating collaborative filtering results

Kakao Corporation

Seongnam, S. Korea

RECOMMENDER SYSTEM ENGINEER & DATA SCIENTIST

Jun 2014 - Aug 2015

- Developed Spark applications and distributed servers for recommender systems, as well as a framework for easier Spark development
- Designed a functional stream processing framework based on Kafka, with real-time metrics collected using OpenTSDB and Grafana

NCSOFT Corporation

Seoul & Seongnam, S. Korea

GAME DEVELOPER

May 2011 - Aug 2011, Aug 2012 - Jun 2014

- Developed a distributed fault-tolerant backend for Lineage Eternal, built using Netty/RxJava and Boost ASIO for nonblocking IO
- Developed the pathfinding engine of Lineage Eternal, used in both the game client and server, built on top of Havok AI

Education

New York University

New York, NY

PH.D. (ANTICIPATED MAY 2019) IN MUSIC TECHNOLOGY, ADVISOR: JUAN PABLO BELLO, GPA 3.76/4.00

Sep 2011 - May 2012, Sep 2015 - Present

- Research interests include automatic music transcription using deep generative models and music recommendation.
- Relevant coursework: Probabilistic Graphical Models, Statistical Natural Language Processing, Convex Optimization, Deep Learning

University of Michigan

Ann Arbor, MI

M.S. IN COMPUTER SCIENCE AND ENGINEERING, ADVISOR: GEORG ESSL, GPA 7.76/9.00

Sep 2009 - Apr 2011

- Relevant coursework: Machine Learning, Information Theory, Advanced Compilers, Advanced Computer Network

Korea Advanced Institute of Science and Technology

Daejeon, S. Korea

B.S. IN ELECTRICAL ENGINEERING (GPA 3.97/4.30) WITH A MINOR IN MATHEMATICAL SCIENCES (GPA 4.03/4.30), OVERALL 3.83/4.30

Sep 2006 - May 2009

Publications

CREPE: A Convolutional Representation for Pitch Estimation

J. W. KIM, J. SALAMON, P. LI & J. P. BELLO, IN *Proceedings of the International Conference on Acoustics, Speech, and Signal Processing*

April 2018

Fast Music and Audio Processing Using the Julia Language

J. W. KIM, S. RUSSELL, & J. P. BELLO, IN *Proceedings of the AES Conference on Semantic Audio*

June 2017

Concepts and practical considerations of platform-independent design of mobile music environments

J. W. KIM & G. ESSL, IN *Proceedings of the International Computer Music Conference*

Jul 2011

Presentations

No More “sbt assembly”: Rethinking spark-submit using CueSheet

Boston, MA

SPARK SUMMIT EAST 2017

Feb 2017

MusicProcessing.jl: Music Information Retrieval in Julia

Cambridge, MA

JULIA CON 2016

Jun 2016

Building High Performance Servers with Rx and Functional Reactive Programming

Seongnam, S. Korea

NEXON DEVELOPER CONFERENCE 2014

May 2014

Miscellaneous

Programming Scala, Python, Java, C/C++ professionally, and Julia, ObjC, PHP, JS, TS, Matlab for personal/research projects

Coursera Intro to Functional Analysis, Principles of Reactive Programming, Functional Programming Principles in Scala

Languages English, Korean (native), Japanese (limited working proficiency)