UNIVERSITÀ DEGLI STUDI DI MILANO

TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO   **ID CODE 6114**

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at **Dipartimento di Informatica Giovanni Degli Antoni**

Scientist- in – charge: **Nicolo Cesa-Bianchi**

[Name and surname]

CURRICULUM VITAE

PERSONAL INFORMATION

Surname	Jang
Name	Kyoungseok

PRESENT OCCUPATION

Appointment	Structure
Postdoctoral Researcher	New York University

EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
Degree	Mathematics Major (Computer Science Minor)	Korea Advanced Institute of Science and Technology (KAIST)	2015
Specialization			
PhD	Mathematics	KAIST	2022
Master	Mathematics	KAIST	2022 (MS & Ph.D. Integrated)
Degree of medical specialization			
Degree of European specialization			
Other			

REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date of registration	Association	City

FOREIGN LANGUAGES

Languages	level of knowledge
Korean	Native
English	Fluent

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2011-2015	**Presidential Fellowship,** Korea Advanced Institute of Science and Technology (KAIST)
2011-2015	**Presidential Science Scholarship,** KOrea Student Aid Foundation (KOSAF)
2022	**2022 NeurIPS Scholar Award**
2013	**Best of the Best Security Leader Education Student,** Korea Institute of Science and Technology Information (KISTI)
2011	**30th University Students Contest of Mathematics – Silver Prize,** Korean Mathematical Society
2012	**Math Problem of the Week – 1st Prize,** Korea Advanced Institute of Science and Technology (KAIST)

TRAINING OR RESEARCH ACTIVITY

description of activity
I am a postdoctoral researcher working with Prof. Komiyama Junpei at the New York University. Previously, I spent one great year as a postdoc with Prof. Kwang-Sung Jun at the University of Arizona. I got my Ph.D. in the Department of Mathematical Science at KAIST (Korea Advanced Institute of Science and Technology) with the advisor Wanmo Kang. My research interests lie in the mathematical analysis of machine learning problems. More specifically, my research has been focused on • Sequential decision-making (Main)   ▪ Reinforcement learning, bandit problems (high-dimensional bandit, contextual bandit) • Generalization error (PAC-Bayes Bound)

PROJECT ACTIVITY

Year	Project
2023	**Postdoctoral Researcher,** New York University – Stern. Major research topic of my group was the bandit problems. Especially we focused on best arm identifications in Bayesian setting. Advisor: Komiyama Junpei
2022	**Postdoctoral Researcher,** University of Arizona. Major research topic of my group was the bandit problems. Especially we focused on sparse and low-rank bandits, which requires knowledge on high-dimensional statistics. We also worked on the contextual bandit, pure exploration, and PAC Bayesian bound analysis. Advisor: Kwang-sung Jun
2016-2019	**Center for SuperIntelligence (CSI) project by KakaoBrain.** My main subject was exploiting the properties of the hyperbolic space to the generative models (GAN, VAE) or classification problems.

PATENTS

Patent

CONGRESSES AND SEMINARS

Date	Title	Place
2023	Improved Time-Uniform PAC-Bayes Bounds using Coin Betting	**ICML Workshop 'PAC-Bayes Meets Interactive Learning' – Contributed Talk, Hawaii**
2022	PopArt: Efficient Sparse Regression and Experimental Design for Optimal Sparse Linear Bandit"	**NeurIPS Presentation – Spotlight and Poster session, New Orleans**
2022	PopArt: Efficient Sparse Regression and Experimental Design for Optimal Sparse Linear Bandit	**Simons Institute Worshop – Quantifying Uncertainty: Stochastic, Adversarial, and Beyond: poster session, Berkeley**
2021	Improved Regret Bounds of Bilinear Bandits using Action Space Analysis	**ICML Presentation – Spotlight and Poster session, Virtual**
2021	Improved Regret Bounds of Bilinear Bandits using Action Space Analysis	**Korea AI Association – Best Paper Session, Virtual**
2021	Hyperbolic Variational Autoencoder	**Center for SuperIntelligence (CSI) Workshop, Pangyo, South Korea**

PUBLICATIONS

Books
[title, place, publishing house, year …]

Articles in reviews
[title of the article, review, place, publishing house, year …]

Congress proceedings (I believe this is Conference Proceedings)
PopArt: Efficient Sparse Regression and Experimental Design for Optimal Sparse Linear Bandits, NeurIPS, New Orleans (U.S.), 2022
Tighter PAC-Bayes Bounds Through Coin-Betting, Conference on Learning Theory (COLT), Bengalulu (India), 2023
Improved Regret Bounds of Bilinear Bandits using Action Space Analysis, ICML, Virtual, 2021
Low-rank Bandits via Arm-set-dependent Exploration, Under Review, 2023

OTHER INFORMATION

Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Please note that CV WILL BE PUBLISHED on the University website and It is recommended that personal and sensitive data should not be included. This template is realized to satisfy the need of publication without personal and sensitive data.

Please DO NOT SIGN this form.

Place and date: New York, 01/01/2024