

Cheol Jun Cho

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EDUCATION

University of California, Berkeley <i>Ph.D. in Computer Science</i> ◦ Advisors: Gopala K. Anumanchipalli and Jack L. Gallant	Aug 2021 – Present
Seoul National University <i>B.S. in Computer Science and Engineering</i> ◦ Summa Cum Laude & Ranked 1st in College of Engineering	Mar 2014 – Aug 2020

RESEARCH EXPERIENCE

Berkeley Speech Group at UC Berkeley <i>Graduate Student Researcher</i>	<i>Berkeley, CA, USA</i> Aug 2021 – Present
Gallant Lab at UC Berkeley <i>Graduate Student Researcher</i>	<i>Berkeley, CA, USA</i> Aug 2021 – Present
Berkeley AI Research Lab <i>Graduate Student Researcher</i>	<i>Berkeley, CA, USA</i> Aug 2021 – Present
Chang Lab at UCSF <i>Graduate Student Researcher</i>	<i>San Francisco, CA, USA</i> Aug 2023 – Dec 2023
Computational Clinical Science Lab at SNU <i>Research Assistant</i>	<i>Seoul, Korea</i> Sep 2020 – Jul 2021
Center for Neuroscience, Brain Science Institute at KIST <i>Research Assistant</i>	<i>Seoul, Korea</i> Jul 2020 – Dec 2020
KAIST Interaction Lab <i>Undergraduate Research Assistant</i>	<i>Daejeon, Korea</i> Jun 2019 – Aug 2020
Computing and Memory Architecture Lab at SNU <i>Undergraduate Research Assistant</i>	<i>Seoul, Korea</i> Dec 2018 – Jun 2019

JOURNAL PUBLICATIONS

A Streaming Brain-to-Voice Neuroprosthesis to Restore Naturalistic Communication Cho, C.J.* , Littlejohn, K. T.*, Liu J. R., Silva A. B., Yu B., Anderson V. R., Kurtz-miott C. M., Brosler S., Kashyap A. P., Hallinan I. P., Shah A., Tu-Chan A., Gangluy K., Moses D. A., Chang E. F., Anumanchipalli G. K ⁺ . (*, +: equal contribution)	2025 Nature Neuroscience
Coding Speech through Vocal Tract Kinematics Cho, C.J. , Wu, P., Parbhune, T. S., Agarwal, D., and Anumanchipalli, G. K.	2025 IEEE JSTSP
A Bird's Eye View of Brain Activity in Socially Interacting Mice through Mobile Edge Computing (MEC) Kim, J.*, Kim, C., Han, H., Cho, C.J. , Yeom, W., Lee, S.Q*, Choi, J.H.*	2020 Science Advances

CONFERENCE PUBLICATIONS

Sylber: Syllabic Embedding Representation of Speech from Raw Audio Cho, C.J. , Lee, N., Gupta, A., Agarwal, D., Chen, E., Black, A. W., Anumanchipalli, G. K.	2025 ICLR
Stutter-Solver: End-to-end Multi-lingual Dysfluency Detection Zhou, X., Cho, C.J. , Sharma, A., Morin, B., Baquirin, D., Vonk, J., Ezzes, Z., Miller, Z., Tee, B.L., Gorno-Tempini, M.L., Lian, J., Anumanchipalli G. K.	2024 SLT

Fast, High-Quality and Parameter-Efficient Articulatory Synthesis using Differentiable DSP	2024 SLT
Liu, Y., Yu, B., Lin, D., Wu, P., <u>Cho, C.J.</u> , Anumanchipalli G. K.	
SD-HuBERT: Sentence-Level Self-Distillation Induces Syllabic Organization in HuBERT	2024 ICASSP
<u>Cho, C.J.</u> , Mohamed, A., Li, S. W., Black, A. W., and Anumanchipalli, G. K.	
Self-Supervised Models of Speech Infer Universal Articulatory Kinematics	2024 ICASSP
<u>Cho, C.J.</u> , Mohamed, A., Black, A. W., and Anumanchipalli, G. K.	
Unconstrained Dysfluency Modeling for Dysfluent Speech Transcription and Detection	2023 ASRU
Lian, J., Feng, C., Farooqi, N., Li, S., Kashyap, A., <u>Cho, C.J.</u> , Wu, P., Netzorg, R., Li, T., and Anumanchipalli, G. K.	
Neural Latent Aligner: Cross-trial Alignment for Learning Representations of Complex, Naturalistic Neural Data	2023 ICML
<u>Cho, C.J.</u> , Chang, E.F., and Anumanchipalli, G.K.	
A variational autoencoder provides novel, data-driven features that explain functional brain representations in a naturalistic navigation task	2023 VSS
<u>Cho, C.J.</u> , Zhang, T., and Gallant, J. L.	
Evidence of Vocal Tract Articulation in Self-Supervised Learning of Speech.	2023 ICASSP
<u>Cho, C.J.</u> , Wu, P., Mohamed, A. and Anumanchipalli, G.K.	
Speaker-Independent Acoustic-to-Articulatory Speech Inversion	2023 ICASSP
Wu, P., Chen, L., <u>Cho, C.J.</u> , Watanabe, S., Goldstein., L., Black, A., Anumanchipalli, G.K.	

AWARDS

Nominated for 2024 BCI Award by BCI Award Foundation	Oct 2024
Meta-BAIR Commons Program (Year 5)	Sep 2023
Meta-BAIR Commons Program (Year 4)	Sep 2022
Kwanjeong Study Abroad Scholarship (funding for PhD program up to 5 years)	Jul 2021
President's Award for 1st ranked graduation at SNU College of Engineering	Aug 2020
Best research award from 2019 Brain-Mind-Behavior Research Presentation at SNU	Dec 2019
1st place of International Capstone Design Fair 2019 (Korea, China)	Nov 2019
2nd place of SNU Creative Design Fair of SNU College of Engineering	Sep 2019
SNU's Tomorrow's Engineers Membership (honor society of college of engineering)	May 2016
Korea National Scholarship (fully funded)	2016 Spring, 2018 Fall-2019 Fall
Army Commendation Medal (ARCOM)	Jun 2018
Certificate of Appreciation (CA) from US 8th Army	Jun 2018
SNU Merit Scholarship (fully funded)	2015 Spring, Fall
SNU Merit Scholarship (half funded)	2014 Fall

INVITED TALKS

<i>Articulation and Syllables: Natural Coding Principles of Speech Representation Arising from Self-Supervised Learning</i>	Jan 28 2025
Research seminar at ChangeLing Lab at CMU	
<i>Emergent Phonological Structures in Self-Supervised Learning of Speech</i>	Jan 28 2025
Lightning talk at BayLI (Bay area Language processing Interest group)	
<i>A streaming silent-speech neuroprosthesis for restoring naturalistic communication</i>	Sep 9 2024
BCI Award 2024	
<i>Coding Speech through Vocal Tract Kinematics</i>	Sep 29 2024

Research seminar at CoML team in Paris, France

TEACHING EXPERIENCE

EE 225D. Audio Signal Processing in Humans and Machines

Graduate Student Instructor

UC Berkeley EECS

Aug 2024 – Dec 2024

- Designed and graded assignments
- Mentored students for final research projects
- Hosted and gave guest lectures

OTHER SERVICES

Military Service

Sep 2016 - Jun 2018

- Korean Augmentation to the United States Army (KATUSA)
- Received CA from US 8th Army and ARCOM
- Completed service as sergeant