

HYUN-HWAN JEONG

Postdoctoral Associate

I am a postdoctoral associate in the [Department of Molecular and Human Genetics](#) at the [Baylor College of Medicine](#) and [Jan and Dan Duncan Neurological Research Institute](#). I have received my Ph.D. degree in computer science from [Ajou University](#) in August 2015 and started the postdoctoral position in the lab of [Dr. Zhandong Liu](#), and co-mentored by [Dr. Huda Zoghbi](#), since September 2015.

During my Ph.D. studies, I was highly focused on the development of integrative network analysis framework for multiple omics data using information-theoretic measure. I am now focusing on developing a quantification algorithm and computational pipeline construction for NGS data for the neurological disorder.

I am also a developer of [SalmonTE](#) and [CB²](#).



EDUCATION

2009
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2015

Ajou University

Ph.D. in Computer Science and Engineering 📍 Suwon, South Korea
Thesis: Integrative network analysis framework for multiple omics data using information-theoretic measure

2007
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2009

Ajou University

M.Eng. in Information and Communication Technology 📍 Suwon, South Korea
Thesis: Missing SNP genotype imputation by heuristic algorithm

2003
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2007

Ajou University

B.S. in Information and Computer Engineering 📍 Suwon, South Korea

RESEARCH EXPERIENCE

2015
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Present

Postdoctoral Associate

Department of molecular and human genetics, Baylor college of medicine 📍 Houston, Texas
• Mentor: Huda Zoghbi and Zhandong Liu

2014
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2015

Research assistant

Health Avatar Project, National Core Research Center(NCRC) 📍 Suwon, South Korea
• Developed an multi-omics data integration software (MINA) integrative omics data analysis using clinical outcome-guided mutual information network.

TEACHING EXPERIENCE

2014
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2015

C Programming

Part time Instructor of C programming at Ajou University. 📍 Suwon, South Korea

2015

Software problem solving skill training

CONTACT INFO

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🌐 github.com/hyunhwaj

For more information, please contact me via email.

SKILLS

Experienced in algorithm design and statistical learning models.

Full experience with next generation sequencing data analysis.

Highly skilled in R and Python.

This resume was made with the R package [pagedown](#).

Last updated on 2020-01-24.



SELECTED PEER-REVIEWED PUBLICATIONS

- 2019 **Are HHV-6A and HHV-7 Really More Abundant in Alzheimer's Disease?**
Neuron
Hyun-Hwan Jeong, Zhandong Liu
- 2019 **Beta-binomial modeling of CRISPR pooled screen data identifies target genes with greater sensitivity and fewer false negatives**
Genome Research
Hyun-Hwan Jeong, Seon Young Kim, Maxime W.C. Rousseaux, Huda Y. Zoghbi, Zhandong Liu
- 2018 **Tau Activates Transposable Elements in Alzheimer's Disease**
Cell Reports
Caiwei Guo, **Hyun-Hwan Jeong**, Yi-Chen Hsieh, Hans-Ulrich Klein, David A. Bennett, Philip L. De Jager, Zhandong Liu, Joshua M. Shulman
- 2018 **An ultra-fast and scalable quantification pipeline for transposable elements from next generation sequencing data**
Biocomputing 2018
Hyun-Hwan Jeong, Hari Krishna Yalamanchili, Caiwei Guo, Joshua M. Shulman, Zhandong Liu
- 2017 **CRISPRcloud: a secure cloud-based pipeline for CRISPR pooled screen deconvolution**
Bioinformatics
Hyun-Hwan Jeong, Seon Young Kim, Maxime W C Rousseaux, Huda Y Zoghbi, Zhandong Liu
- 2015 **Integrative network analysis for survival-associated gene-gene interactions across multiple genomic profiles in ovarian cancer**
Journal of Ovarian Research
Hyun-hwan Jeong, Sangseob Leem, Kyubum Wee, Kyung-Ah Sohn