

Begench Hangeldiyev

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EDUCATION

Korea Advanced Institute of Science and Technology (KAIST) B.Sc. in Computer Science (<i>Minor: Chemical & Biomolecular Engineering</i>)	August 2020 – Present Daejeon, South Korea
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RESEARCH EXPERIENCE

Research Intern Institute for Basic Science (IBS), <i>Data Science Group</i>	June 2022 – Present Daejeon, South Korea
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- Proposed new antibody-specific models for protein sequence design using graph attentive neural networks.
- Proposed novel loss functions for protein sequence design given antibody-specific characteristics.
- Supporting the development an AI-based framework for antigen-conditioned antibody design.

Research Intern KAIST, <i>Neuro-Machine Augmented Intelligence Laboratory (NMAIL)</i>	April 2022 – June 2022 Daejeon, South Korea
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- Collaborated on the development of a deep learning model capable of operating with a wide range of robot grippers enabling the manipulation of objects with different shapes.

PROJECTS

Neural Radiance Fields Python	Fall 2023
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PointNet Model Python	Fall 2023
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CUDA Implementation of Convolutional Layers Python, C, CUDA	Fall 2023
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Neural Machine Translation Python	Spring 2022
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Semantic Segmentation Python	Spring 2022
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PUBLICATIONS

[1] **B. Hangeldiyev**, A. Rzayev, A. Armanuly, L. F. Vecchietti, M. Cha*, H. Kim*, “**Antibody Sequence Design With Graph-Based Deep Learning Methods**” presented at the Korea Software Congress (KSC), Jeju, South Korea, 2022.

HONORS AND AWARDS

Gold Medal in National Chemistry Olympiad, 2019, Turkmenistan
Gold Medal in Amity International Chemistry Olympiad, 2019, New Delhi, India
Bronze Medal in National Chemistry Olympiad, 2020, Turkmenistan

SKILLS

Languages: Turkmen (Native), English (Fluent), Turkish, Russia,
Programming Languages: Python, JavaScript, Scala, C, CUDA, Java, HTML5, CSS
Python libraries (Deep Learning, Data Science): PyTorch, Numpy, Pandas, Scikit-learn
Web Programming: ReactJS, HTML5, CSS