

Bolat Tleubayev

tleubayevb@gmail.com

[website](#), [linkedin](#), [github](#), [scholar](#)
[python](#), [matlab](#), [swift](#), [flutter](#)

Education

KU Leuven, MSc in Artificial Intelligence

September 2020 - July 2021

- Graduated with Cum laude 69.25%
- Thesis at Medical Imaging Research Centre for medical applications of computer vision

Nazarbayev University, BSc in Robotics and Mechatronics

August 2015 - May 2019

- Graduated with GPA 3.37 (out of 4.00)
- ADHD and ASD research at Republican Children's Rehabilitation Center

Experience

Software developer, Open Summer of Code and imec, Belgium

July 2021

- Developed native augmented reality application for iOS using ARKit.
- Developed positioning and routing capabilities using Google Maps and OpenStreetMap.
- Developed iOS and Android frontend for GPS and hardware based application using Flutter.

Research assistant, Nazarbayev University, Kazakhstan

August 2019 - December 2020

- Conducted robot-assisted sessions for children suffering from severe ASD and ADHD.
- Developed Ubuntu tablet software for joint dysgraphia research with EPFL CHILI Lab.
- Initiated Google Tacotron based trilingual text-to-speech engine creation and data collection.

Computer vision intern, KazAeroSpace LLP, Kazakhstan

February 2019 - April 2019

- Initiated development of automated satellite images labelling software.
- Initiated incorporation of computer vision technologies to existing surveillance products.
- Consulted engineers on sensors for unmanned aerial vehicles for geomagnetic scanning.

Leadership and Awards

Team leader, Delaware Student Game

March 2021

Managed and represented a team of artificial intelligence program students on the coding competition Delaware Student Game by delaware BeLux. Our team won the third place with proposed industrial applications of computer vision and augmented reality.

CTO and developer, ABC startup incubation

October 2020

Developed an application for fashion industry using Firebase and Flutter. The app supported feed, posting, commenting, and bar-code scanning. Supervised technical and design decisions of the application. Our team won the competition landing ~4,700 USD funding.

Participant, Coca-Cola Prototype competition

May 2020

Developed native iOS based application in Swift that supported augmented reality gaming and Firebase backend according to given specifications.

Participant, ideaTHON hackathon

May 2020

Developed native iOS that supported Firebase backend and Facebook API for information and files exchange between teacher and students. The proposed solution landed 5th place.

Presenter, International Conference on Human-Robot Interaction 2020

March 2020

Won the best demo award on the ACM/IEEE International Conference on Human-Robot Interaction 2020 in Cambridge, United Kingdom for video presentation "CoWriting Kazakh: Learning a New Script with a Robot - Demonstration".

Selected publications

Asselborn, T., Johal, W., Tleubayev, B., Zhexenova, Z., Dillenbourg, P., McBride, C. and Sandygulova, A., 2021. **The transferability of handwriting skills: from the Cyrillic to the Latin alphabet**. Nature partner journal: science of learning, 6(1), pp.1-11.

Tleubayev, B., Zhexenova, Z., Zhakenova, A. and Sandygulova, A., 2019, March. **Robot-assisted therapy for children with ADHD and ASD: a pilot study**. In Proceedings of the 2019 2nd International Conference on Service Robotics Technologies (pp. 58-62).