Bolat Tleubayev

website, linkedin, github, scholar
python, matlab, swift, flutter

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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
- Dysgraphia research at state primary school

Experience

Software developer, Open Summer of Code and imec, Belgium **July 2021**
- Developed 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 therapeutic 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.

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.

Sandygulova, A., Johal, W., Zhexenova, Z., Tleubayev, B., Zhanatkyzy, A., Turarova, A., Telisheva, Z., CohenMiller, A., Asselborn, T. and Dillenbourg, P., 2020, March. **CoWriting Kazakh: learning a new script with a robot**. In Proceedings of the 2020 ACM/IEEE International Conference on Human-Robot Interaction (pp. 113-120).

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).