

## LYUBOV DUDCHENKO

11th grade student at NIS PhMD Almaty

# **ACHIEVEMENTS**

3rd place at the World Robot Olympiad, Hungary;

1st place at International Science & Technology Innovation Contest in China, ChongQing; Award from Gao Schichi (Chinese scientist);

Award from the largest Chinese tech company "Sanray";

1st place at VEX Robotics Competition in London, UK;

Finalist (top 6 in the world) of International Tech Competition Technovation, USA;

1st place at the Central Asian YouthMobile Contest held by UNESCO;

1st place at Nurintech-2017 (republican competition of innovative projects), won 1 000 000 tenge;

1st place at Nurintech-2019 (republican competition of innovative projects), won 1 000 000 tenge;

1st place at national Baiterek Hackathon-2019, won 1 000 000 tenge;

1st place at EcoStartup-2019 competition, won 750 000 tenge;

Participant of Global Game Jam - world's largest game creating event;

1st place at Republic stage of WRO 2019 (World Robotics Competition);

1st place at VEX Robotics Republican Competition;

3rd place at Robocon Games (republican robotics competition);

1st place at National Innovation Competition 2017 (won MacBook Pro);

1st and 3rd place at KokZhailau Hackathon by Visit Almaty, won 150 000 tenge;

1st place at National Hackathon "HackDay 2018", won 500 000 tenge;

The winner of the GoViral pitching session, won 1 000 \$;

1st place at national robotics competition Kazrobotics - 2018;

1st place at TechCup republican competition, got special award from mayor of Almaty; 1st place at Startup Battle;

The winner of TOM makeathon (Contest of technologies for people with disabilities);

Finalist of republican competition "Seedstars Astana 2018" - top 10 startups in Kazakhstan; Participated in Almaty Mini Maker Faire 2018;

3rd place at Republic stage of WRO 2017 (World Robotics Competition);

# **PROJECTS**

**Oqyp ko'r**- a portable "Text-to-Braille" conversion device for blind people. Making text-recourses affordable for them, it helps enlarge students' opportunities in inclusive education.

**AIR** - app, where user can build and program his own robot and then test it in Augmented Reality. This app can substitute expensive robotics labs, so that it makes robotics accessible for everyone.

**joARney** - city guide in augmented reality. It helps to develop tourism in Kazakhstan, acquainting foreigners with the sights of our city and making traveling more fun and simple.

**SmartCane** - a digital cane for blind people, which helps them orientate in the city.

**AgroSmart** - a multifunctional complex that performs general agricultural tasks.

**TECO** - a 3D mobile game that merges educational and entertainment tools to help players change their behavior and become more eco-conscious. It presents real-life issues and challenges players to solve them while sharing useful information along the way. TECO provides a strong incentive to recycle more through special hardware features and augmented reality.

**Ziggurat** - robot teacher which has art and letter tracing, math, Braille, sign language lessons, Library, Reward system and Augmented reality game. It teaches students in easiest way according to their needs and interests, help teachers to tackle with paper work, motivates students to study and supprots inclusive education.

**eduAR** - interactive pen that can be used to draw in the air. It makes students' study process more interesting and accessible for children with hand disabilities or autism.

**Baiterek** - app for ZhylStroiSberBank company, which speeds up the work of people registering employees by automatically recognizing data from a person's identity card.

**SmartRiver** - river water level control system that prevents mudflows.

RoboLab - robotics lab in Virtual Reality.

## VOLUNTEER EXPERIENCE

- Since june 2018: The teacher of robotics and programming at American Corner (MakerSpace) in Almaty. Organized robotics club for children from dysfunctional families.
  Work process: Teaching children programming in C, Python languages and picking up 3d printer and 3d modeling. Programming Arduino micro-controllers.
- Organizer of International Robotics Competition in Almaty, Kazakhstan;

# ADDITIONAL EDUCATION

- Got scholarship for 1month educational program in Germany;
- Graduated from «Girls in STEM summer camp», organized by the US Consulate
- Attended network 1-week robotics training camp among students of NIS Shymkent, Kazakhstan
- Participated at 'nFactorial Incubator 2016 mobile applications development bootcamp
- Intern at MethodPro 2018 Data Science and Backend Development Internship

#### IMPACT TO ROBOTICS DEVELOPMENT IN KAZAKHSTAN

- •Organizer of the Hour Code movement in Kazakhstan, as a result of which 405,000 children became acquainted with programming
- Was speaker at the TEDx conference having a speach about how new technologies can solve social problems.
- · Organized robotics club for children from dysfunctional families
- · Taught children robotics using WeDo and Lego Mindstorms at Lessons.kz educational center

### SKILLS IN ROBOTICS AND PROGRAMMING

- ·Hardware development (Arduino, RaspberryPi)
- Project managemant(SCRUM, AGILE)
- •Data analysis and machine learning (R, Python)
- Game development (Unity)
- Web development(HTML&CSS
- IOS development(Swift)

## **HOBBIES**

#### **Sport**

- ·Blue belt in karate.
- ·Member of the school team for basketball.
- •Was engaged in swimming for eight years. Got 1st place at city competition among girls born in 2002.
- •Participant of Almaty Marathon 2019.

#### Music

Graduated from six classes of music school, where studied solfeggio and music literature, played the piano, sang in the choir

### Sharing knowledge and experience

Author of the "Robotics" column in "Exponenta-magazine". I simply explain complex mechanisms, publish interviews with famous local experts, so that motivate children to do robotics.

#### LANGUAGES

- Russian(native language)
- German(B2/C1 level)
- English (C1)
- Kazakh