Bekatan Satyev

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South Korea, Seoul

EDUCATION

2018 - 2023	Bachelor of Science in Computer Science and Engineering at **UNIST, South Korea**
2018 - 2023	Bachelor of Science in Management Engineering at **UNIST, South Korea**

WORK EXPERIENCE

Research Intern at AI Human Robot Interaction Lab   July 2022 - February 2023

As a Research Intern at the AI Human Robot Interaction Lab, I accomplished the following:

- Developed a mobile voice-activated robot assistant that accurately identifies the target to bring based on expressed feelings and intentions with a 97% accuracy rate.
- Achieved a 5-fold improvement in accuracy for the smallest model through fine-tuning.
- Programmed the robot base and robotic arm, enabling seamless navigation and precise grasping operations.
- Leveraged YOLOv3 for real-time object detection on an IoT device, ensuring swift and accurate responses.
- Utilized OpenAI API for advanced Natural Language Processing capabilities, enhancing the robot's ability to comprehend and respond to verbal commands effectively.
- Optimized the robot's overall performance by engineering custom fine-tuning and testing datasets.
- Analyzed the performance of various language processor variants, considering factors such as accuracy, speed, and cost, to select the most efficient configuration.
- Authored a comprehensive white paper on the project, successfully accepted for presentation at the prestigious IEEE RO-MAN international conference.
- **Stack**: OpenAI API, ROS, YOLOv3, Google Speech Recognition API.

Software Engineer Intern at NUR Telecom   October 2021 - April 2022

Completed the **Intern Labs 3.0 Java Backend Developers** internship, at Nur Telecom, the technology leader in Kyrgyzstan, that offers communications, banking, entertainment and shopping services.

- Developed an online cash register Web App by collaborating with six other intern developers and mentors, that supports electronic wallets for convenience.
- Improved scalability and reliability by building idempotent backend API for Services Entity.
- Enhanced user experience by building a customer friendly frontend for operations on Services.
- Increased the quality of the application by integrating feedback received from communicating with the business clients.
- **Stack**: PostgreSQL, Java Runtime Environment, Spring Framework and Vue.JS.

PUBLICATIONS

Satyev, Bekatan and Hyemin Ahn (2023). "VAFOR: Proactive Voice Assistant for Object Retrieval in the Physical World". In: *2023 32nd IEEE International Conference on Robot and Human Interactive Communication (**RO-MAN 2023**) (accepted)*.

SKILLS

Workflow	JIRA Software, Git
Expertise	Backend development, Machine Learning, Robotics, Data engineering
Topics	Data structures, Algorithms, OOP
Technologies	OpenAI API, PyTorch, Node.JS, Spring Boot, Vue.JS, ROS, Numpy, Pandas
Programming Languages	Java, Python, C/C++, JavaScript, Go