Company

TGO Limited

SME I London

Industry: Gaming and Virtual Reality

T G 0 TOUCH SENSING TECHNOLOGY
GAMING · VR · SPORTING EQUIPMENT
MUSIC & AUDIO · MEDICAL · AUTOMOTIVE

Academics

Ivan Tyukin
Professor at the School of Computing and Mathematic Sciences with expertise in Applied Mathematics.

Evgeny Mirkes
Lecturer at the School of Computing and MathematicalSciences with expertise in Applied Mathematics.

Associate

KTP No1 – Ying Liu
Research Associate in Machine Learning for Smart Sensing

Background: Data science focused PhD (physics) candidate with four years of industry experience

KTP No2 – Yuxiang Huang,
Research Associate in Machine Learning for Smart Sensing

Background: PhD, Electronics Engineering – Sensor and environment monitoring development

Project Aim

To develop an Artificial Intelligence (AI) technology that will allow learning and recognising tactile gestures using the company's material based tactile sensing technology and employing advanced machine learning (ML) and signal processing.

TG0's product is unique on the market but to keep ahead of any future competition, the business needed the product to be able to learn from tactile gestures. the challenge of developing ML systems and packaging them in a small enough manner initially led TG0 to use a very restrictive library of gestures, which ultimately was not giving the intuitive experience desired.

This double KTP allowed Tangi0's control systems to learn from their uses and thus become one of the most intuitive ones on the market.

Project Outcomes

The KTP has been instrumental in reshaping TG0's trajectory and strategy in pivotal ways:

- **Market Diversification:** TG0, initially entrenched in B2B operations within the automotive sector, has ventured into the B2C realm, courtesy of the KTP. This transition is evident in their move from a strict licensing model to introducing a VR controller, ALIE, for the gaming market, expanding their revenue potential and market outreach.

- **Technological Enhancement:** The KTP has acted as a catalyst for TG0 to break their previous limitations in tactile gesture recognition. No longer restricted to a limited gesture library, the system's capability now encompasses learning from user interactions, ensuring a richer user experience. The initiative enabled the infusion and optimization of compact ML systems, aligning with Tangi0's niche needs.

The KTP endowed TG0 and its staff with a wealth of new knowledge and capabilities: Advanced Gesture Recognition, Embedded ML Expertise and Data-Driven AI Systems

Both Associates were offered a full-time job at the end of the project.

Find out how KTP can help your business. Contact **KTP@le.ac.uk**