

# Luka Ivanković

☎ (385) 91 538 8467

✉ ivkalu@gmail.com

🌐 Ivkalu

## About

---

I'm a creative, enthusiastic, and competitive developer with over 2 years of experience in a fast-paced startup environment. With a strong foundation in software engineering and a passion for machine learning and music tech, I bring technical versatility, and a drive to turn ideas into real world. *Learn fast hard things* – Cal Newport

## Work Experience

---

### TensorPix

may 2023 – may 2025

- Engineered and integrated an audio denoising model into the platform's infrastructure, enabling users to clean audio channels in their videos directly on the site (**PyTorch**, **Django**, **FFmpeg**)
- Independently implemented offline test automation with **GitHub actions** and **Docker** that ensured each PR has no errors prior pushing, thus saving developers 5+ min per PR in all repositories
- Developed an online video compression tool using **WebAssembly** and **FFmpeg**, enabling users to reduce video file sizes by up to 80% directly in the browser (**Vue.js**)

### Ericsson Nikola Tesla

oct 2022 – feb 2023

- Radio software engineer - Java and C++

## Education

---

### The Faculty of Electrical Engineering and Computing

2019 – summer 2025

- Bachelor's thesis - I developed a multiplayer combat game with a shape-drawing mechanic. **Resnet18** was trained to classify those shapes up to 99% accuracy
- Currently working on Master's thesis - Emulation of Guitar Effects Using Machine Learning. Developed ML models including **LSTMs**, **WaveNet**, **TCN**, **SSMs** to emulate analog guitar effects. Created a custom dataset with over 5 hours of processed and clean guitar recordings. Achieved performance comparable to state-of-the-art approaches in audio effect modeling
- Relevant courses: Machine Learning 1, Deep Learning 1, Deep Learning 2, Neural Networks, Computer Vision

## Projects

---

### Lumen Data Science 2023

Pytorch

- **Vgg16**, **Resnet18** were trained to classify instruments in a song up to 90% accuracy using audio spectrograms. Performed full dataset analysis to identify optimal preprocessing and model configuration.

### Hackatons

- Won AI Battlegrounds Hackaton 2023. Participated in Algotrade Hackaton 2024.

### NeuroEvolution of Augmenting Topologies

PyGame

- NEAT was used to train a Chrome Dino get a score of 10000 in the Dinosaur Game

## Interests and additional information

---

I enjoy the challenge of learning new skills. I've been teaching myself **guitar** for the past 8 years and recently started learning **piano**. I believe both programming and playing instruments tackle the same creative part of the brain. I regularly train to keep my body and mind healthy. I'm a casual D&D and Catan player.