Kert Laansalu

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EDUCATION

Imperial College London

London, United Kingdom

2020 - 2024

Electronic and Information Engineering, MEng

- On course to graduate with 2:1 or above
- Standout Modules: High Level Programming, Machine Learning, Neural Networks, Compilers, Computer Algorithms

Tallinn French School

Tallinn, Estonia

2007 - 2020

Secondary and Primary School

- Graduated with high honors 3A* (Physics, Mathematics, Estonian)
- Awarded a Medal for excellent academic attainment by the Estonian Government

WORK & LEADERSHIP EXPERIENCE

Junior Software Engineer

Tallinn, Estonia

SEB bank

April – September 2023

- Played a key role in creating an exception handler for the D8 platform of the bank's backend, ensuring efficient error handling and system stability
- Developed and deployed an end-to-end Incentives Solution, successfully delivering customer incentives via email to encourage the completion of Apple Pay sign-ups

Hardware and Technology Intern

Tallinn, Estonia

Nordnet OÜ

2019 - 2021

- Oversaw and managed the company's computer fleet, ensuring optimal performance and functionality
- Diagnosed and resolved hardware and software issues promptly, minimizing downtime and maximizing productivity

Leadership Academy Delegate

Portland (MA), USA

Baltic-American Leadership Academy

May – August 2019

- Participated in a 3-month long academy, studying entrepreneurship, market analysis and leadership
- Led a team of 6 through the stages of developing and pitching a business idea to potential investors

PROJECTS & SOFTWARE ENGINEERING EXPERIENCE

Decision Trees and Neural Networks – (Python: Numpy, Pytorch, Scikit Learn, Pandas)

- Wrote an algorithm for decision tree training, performance evaluation and pruning
- Designed a neural network library for predicting house prices in California

Autonomous Mars Rover Project – (C++, Verilog, HTML, JavaScript, SQL, PHP, AWS)

- Developed a rover system capable of exploring environments, identifying and navigating around obstacles, recording and sending data, and responding to user input
- Integrated Computer Vision and Tracking System, and included 3-mode functionality (Remote Control, Autopilot, and Shortest Path to Coordinate)

C90 to MIPS compiler -(C++, Flex, Bison)

 Developed a compiler that takes pre-processed C90 and produces MIPS assembly, with functionality implemented for all basic C constructs

Augmented Reality IoT project – (Python, Verilog, React Native, NoSQL, AWS)

- Created an AR application that displays instructions for navigation, weather data and location of other users
- The app could receive commands from a handheld FPGA via TCP communication and access data stored in a DynamoDB database running on AWS

SKILLS & ACHIEVMENTS

Technical Skills: Java, Python, C++, React Native, Node JS, Spring Boot, SQL, AWS, GIT, Verilog, Flex, MATLAB, Excel **Languages:** English (fluent), Estonian (native), French (proficient), Russian (moderate)

Non-Academic Achievements: Leader of finalist debate team at Estonian National Debate competition (2019); Founder and CEO of a start-up creating contemporary clothing for young people; 3rd place in Model United Nations (2019); Participated in *Hüppelaud* Hackathon (2018) creating an NFC ring for contactless payments

Academic Achievements: Head of Student Council (2018-2020); 1st place Estonian National Physics Olympiad (2017); In the Top 3% of the Estonian high school graduates (2020)

Interests: Robotics, Choir, Debating, Folk dancing, Skiing, Football