




VIKTAR MAKOUSKI

 github  mcviktor@tut.by

 +7(925)497-16-93

EDUCATION

National Research University Higher School of Economics

2020 - 2024

Applied Mathematics and Informatics

Relevant courses: advanced c++, algorithms and data structures, linear algebra, calculus, basic python, computer architecture and operating systems, probability theory and statistics, machine learning, computer networks

WORK EXPERIENCE

Huawei Russian Research Institute

december 2021 - present

- Worked at EOLang a new experimental programming language. I wrote static analysis programs for it, academic papers about it and made some contribution in main compiler of EOLang - Researched assembly code generated by C++ compiler and ways to optimize it. Researched papers about generating of assembly and dynamic dispatch mechanism. Wrote programs and research what assembly generated from them. Write paper about it.

TECHNICAL SKILLS

Languages: C/C++, Python, Bash, x86 asm, Solidity

Tools: Git, Linux, Docker, CMake

Other: Threading, Linux System Calls

PROJECTS

El-Gamal Encrypting

- A C++ program that encrypts and decrypts according to the El-Gamal scheme using the field of polynomials over Z_p . Used El-Gamal algorithm and Fast Fourier Transform. Also implemented my own long arithmetic and polynomials.

Scheme interpreter

- A simple interpreter of Lisp-like language. Used c++, inheritance, unit testing

3D renderer from scratch

- An implementation of ray tracing algorithm in C++ and GLSL. Used C++, OOP, GPU calculations, CMake. led a team of three people. University course project. [github](#)

Smart contracts

- Simple implementations of Ethereum smart contract standards, for example EIP20. [github](#)

AWARDS

- First prize at Belarusian National Olympiad at mathematics, (top 2 countrywide)
- First prize at Belarusian National Olympiad at mathematics, (top 3 countrywide)
- Third prize at Zhaytic International Olympiad at mathematics.