MARK GONCHAROV

Software developer

📍 MIPT

🐙 MarkGoncharovAl

@ goncharov.ma@phystech.edu

🌐 EverRester

📞 +7 (965) 457 - 25 - 05

MAIN INFORMATION

1. **MIPT** - third grade.
2. **9.4** - average mark.
3. **Table tennis** - member of main squad of MIPT's team.

Skill	
C/C++	████████████████
Clang/LLVM	██████████
CM/OpenCL/DPC++	████████
Vulkan	███

WORK EXPERIENCE

Intel — **Undergrad technical intern** — July 2021 - April 2022
Part-time job (3 times per week) and learning in MIPT simultaneously. Performed platform checkers in CM, legalization VectorCompiler-Intrinsics, fixed bugs in VC-backend, helped customers from ISPC and DPC++ ESIMD teams.

PROJECTS

ILab-1 — **SFML** — github: BuildAndRun
Race game, where you can play with friend either one PC or network playmode. In this game you can create your own map and racing on it!

ILab-2 — **OpenCL/DPC++** — github: ILab
Realization on GPU algorithms: bitonic sorting, searching for string's patterns and solving inner Dirichlet's problem. Also in SYCL folder I rewrote this using oneAPI DPC++ for education purposes.

Microntroller — **AVR** — github: Microcontroller
Measuring distance on ATmega8535 using avr-gcc. We programmed Ultrasonic Sensor HC–SR04 and transferred data from MC to computer through UART - communication protocol.

Intel — **CM-frontend** — github: cm-compiler
Created checkers for platform support to specific instructions. Correct llvm-based compiler for CM parser.

Intel — **Vector compiler backend** — github: IGC/VectorCompiler
Upgrade legalization, lowering passes. Fix issues concerned with wrregion/rdregion instructions.

LANGUAGES

English - Upper-Intermediate level graded.

HOBBIES

- Playing **guitar/piano**.
- Training on section of **table tennis**.
- On summer time going **hiking** on mountains.