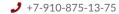
# ALEXANDER ZENKOVICH









## **SKILLS**

#### **Programming**

C++ C++ for any application.

Familiar with template metaprogramming & other tricks

Simple Python for scripting & ML

Haskell

Currently learning the language

Concurrency

The low level: MESI protocol, C++ memory model, simplest lockfree algorithms

Ubuntu user

bash

## Mathematics with applications

**Combinatorics** Intimately familiar with the subject

**Mathematical Logic** 

**Computational Complexity** 

The discipline is large & I cannot know everything

Linear algebra

**Category Theory** 

Basics: Yoneda, left adjoints preserve colimits, monads

#### **Advanced Mathematics**

Homological Algebra

Ring Theory

Algebraic Topology

Algebraic Geometry

## **PROJECTS**

#### Online Space Shooter

- A 2D space shooter game, in which objects fully follow Newtons laws. Very fun.
- Collaborative work with friends
- Written in C++ only

#### C++ stateful metaprogramming library

Work in progress.

This is a very small library which enables one to write template metaprogramming code in an imperative style, with variables, ifs and for-while loops operating on types and constexpr values.

## LANGUAGES

Russian (native)

English (C1)

French (A2)



## **EDUCATION**

B.Sc. in Applied Mathematics & Informatics

**Moscow Institute of Physics and Technology** 

**■** Sept 2020 – present **●** GPA: 4.6/5

#### High school

School #1589, Moscow

**2019-2020** 

● GPA: 5.0/5

Lyceum for Gifted Children, Saransk, Mordovia

**2017-2019** 

GPA: 5.0/5

### OTHER ACHIEVENTS

Gold Medalist at the International **Physics Olympiad** 

Member of the Russian National Team, Moscow, Russia, December 8-15, 2020

Gold medal at the International Zhautykov Olympiad for Physics

Almaty, Kazakhstan, January 2020

## PERSONAL INTERESTS

Drawing

Mountain hiking

Esoteric mathematics