



PROFILE

I am Alex, 24, a physics student at the University of Heidelberg with a deep passion and eagerness to explore and understand our world through natural sciences, and a software engineer with 8 years of experience.

Most of the projects are not on GitHub due to privacy, as those projects do not belong to me. But I can show some code samples per request.

CONTACT

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My website:
<https://alexander.net.ua/>
GitHub:
<https://github.com/sannnekk>

LANGUAGES

German
English
Ukrainian
Russian

OLEKSANDR PETRUSHYN

Physics student at the University of Heidelberg, Software Engineer

EDUCATION

10.2019 – 03.2022
Chemistry BSc at KIT, Karlsruher Institute of Technology

10.2024-now
Physics BSc at the University of Heidelberg

EXPERIENCE

NOX Agency

10.2019 – 02.2020

Dozens of websites using php (Symfony) or RedBean, examples:
<https://ersh.org.ua>, <https://maisonette.com.ua>, <https://jump.biz.ua>, and many others.

IT Student help

01.2020 – 02.2022

Helping bachelor students with programming and maths. Examples:

- Math-App
- 3D-Visualisation with C++
- Canvas Games with Vanilla JS
- Optimization Algorithms
- And much more

Fischer Teamplan Ingenieurbüro GmbH

(commissioned by IPA A-Nord)

04.2023 – 07.2024

I was engineering the QGis and Autocad extensions to automate the infrastructure planning processes. My task was to design two tools for automated planning of the route for a new electricity cable from the northern to the southern part of Germany. 90% of the work consisted of studying optimization algorithms and geometry. The second tool was primarily for tensions forces analysis of the planned cable route. Those tools could automatically analyze the data available to create the most optimized path on the map, consuming terabytes of geodesic and engineering data.

HMnet GbR

04.2021 – today

Full-Stack WEB-Projects. Starting with simple webpages (WordPress or Bitrix) and now working with big eCommerce projects (Symfony, Shopware 6, Node.js+TS, React, Vue). Dozens of automation scripts and apps

Examples:

- [Nobisdesign.de](https://nobisdesign.de)
Shop powered by Shopware 6. For this project I built an app, which synchronizes all the data with another sFTP server every night, transferring products, categories, prices, orders and so on.
- More than 10 other projects php, part of them with Node.js+TypeScript

- See more on my personal website

Own projects

- *Express-controller-decorator*
Public npm-package for extending express library (see my GitHub: @sannnekk)
- *NOO School platform*
An online platform designed to take courses on school subjects & solve tests. It has also an app for android, also available on my GitHub
- *Insane Music 2 (my project from 2017)*
.NET UWP App for Windows for playing music, a simple alternative version of Spotify with lyrics, artists, albums, facts about the song and so on
- *3D engine in JS*
Simple 3D Engine, which uses sigmoid functions to render 3D objects (method created by me to render 3D, way more efficient then raytracing)
- *Algebraic equation solving app*
An app to approximate the roots of algebraic equations using different techniques to speed up my work during the physics & chemistry lab work
- *Molecule rendering app*
A tiny molecule rendering app to render Fischer and Newman projections
- *Image analyzer through Fourier transform*
Just some playground to test different image compression & effects using fourier transform
- My own simple PHP MVC Framework (here it works in production: <https://schaudt-bauelemente.de>)

And more (see alexander.net.ua)
