Vitalii Vrublevskyi

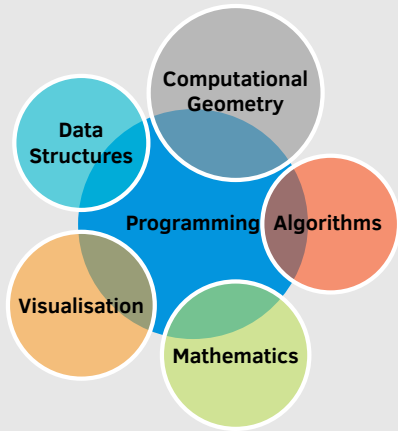## Software Engineer

📞 +380680550459

🌐 github.com/vrublevskiyvitaliy
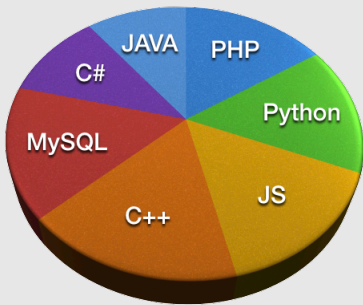
✉ vitalii.vrublevskyi@gmail.com

Skills

Languages

Awards

University:

- 2014: 1 / 8 Ukraine ACM ICPC **72th place**.

High School:

- 2013: 27th All Ukrainian Olympiad in Informatics, Lugansk, Ukraine **third diploma**.

Personal qualities

- Purposeful, responsible, sociable, patient.
- Disciplined and fast learner.

Education

Expected June 2019	**Master degree in Informatics**	Taras Shevchenko National University of Kyiv

Kyiv, Ukraine
Faculty of Computer Science and Cybernetics

June 2017	**Bachelor degree in Informatics**	Taras Shevchenko National University of Kyiv

Kyiv, Ukraine
Faculty of Computer Science and Cybernetics

Experience

Sep 2015 - Present

Software Engineer — lun.ua

Kyiv, Ukraine

Lun.Novostroyki - service for choosing apartments at new buildings.

- Languages: PHP (Yii2 Framework), Python (Flask), MySQL, JavaScript.
- Technologies: Elasticsearch, Angular 2 (basic knowledge).
- Developing new features and fixing bugs.
- Upgrade Yii1 project to Yii2. Migrate Python (Flask) admin panel into Yii2.
- Working on localization and internationalization of project.
- Writing parsers and developing architecture for checking apartment availability of different buildings.
- Refactoring and removing old functionality.
- Writing tests using Codeception Framework.

Sep 2015 - Dec 2016

Software Engineer (Remote) — MP5 Project - WeDesign.Live

London, UK

We Design Live! provides a live collaborative platform for designing. It also includes a slicer software designed from scratch. It uses MP5 as the file format for 3D printing. The designer interface is web based.

- Languages: JavaScript, C++, Python.
- Technologies: ThreeJS, Emscripten.
- Skills: Computational Geometry, Linear Algebra, 3D solid modelling, high performance numerical and graphical calculations on browser (JavaScript/Emscripten);
- Writing unit tests for slicer math functionality.
- Developing JavaScript side of designer, developing architecture for constructive solid geometry (CSG) technique and basic operations like rotation and scale.
- Working on C++ part of project using Emscripten to compile C++ into JavaScript. Writing implicit functions for different 3D objects (tetrahedron, cube with draggable vertices).
- Implemented binding of constrained nonlinear optimization library(NLopt) into project (with Emscripten compiling into JS).

Projects

2016

Greedy approach for solving Art Gallery Problem — Taras Shevchenko National University of Kyiv

The art gallery problem is a visibility problem in computational geometry. It originates from a real-world problem of guarding an art gallery with the minimum number of guards who together can observe the whole gallery.

We proposed greedy approach using Segment Tree and Polygon Convex Decomposition.