

Vladyslav Mokrousov

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EXPERIENCE

Google Summer of Code — Student Software Engineer

MAY 2019 - AUGUST 2019

- Built end-to-end data processing pipeline to visualize satellite weather recordings
- Designed an algorithm for georeferencing of satellite weather images using GDAL C++ library
- Designed and implemented an algorithm to merge several satellite images taking care of overlapping areas
- Developed web app with Python/JS stack to display images on a web map or on a virtual globe
- Implemented unit and integration testing for application components

Aerospaceresearch.net — Open Source Contributor

MARCH 2019 - SEPTEMBER 2019

- Developed major improvements for audio signal decoder — *DirectDemod* project
- Actively involved in community activities, including taking part in discussions, opening issues, pull requests, writing documentation

EDUCATION

Kyiv Polytechnic Institute, Kyiv, Ukraine

Candidate for Bachelor of Science in Software Engineering

JUNE 2021 (expected)

- Major in Software Engineering with a strong foundation in Mathematics
- Coursework: Algorithms; Data Structures; Computer Architecture; Database Development; Discrete Mathematics; Linear Algebra; Mathematical Analysis; Probability Theory; Statistics; Web Development; Components of Software Engineering; Software Design; Computer Networks; OOP; Linux; Java; Compiler development; IoT; Testing; Mathematical Optimization;
- GPA 3.9/4.0

SIDE PROJECTS

mcc — C compiler generating x86-64 assembly

- Developed a compiler for the subset of C language grammar
- Implemented scanner, parser, semantic checker and x86_64 code generator
- Implemented types, composites, statements, function calls, register allocation & more
[caballeto/mcc: C compiler from scratch](#)

datanews.io — News searching API

MAY 2020 - NOW

- Developed software to regularly crawl recent news articles from 100+ news sources
- Built a REST API to provide search access to indexed news articles
- Built Redis-based rate limiting solution, landing page, authentication and payments
- Deployed to AWS with enabled auto-scaling

SKILLS

- | | | |
|-------------|-----------------|---|
| • C++ | Experienced | C++11, STL, GoogleTest |
| • Java | Experienced | Java Core, Spring, Hibernate, REST, building APIs |
| • OOP/OOD | Experienced | OOP, OOD, SOLID |
| • Linux | Experienced | Linux, bash, git |
| • Web | Some experience | JS, HTML/CSS, jQuery, OSI protocols (HTTP, TCP/UDP, etc.) |
| • Python | Skillful | Flask, Anaconda |
| • Databases | Experienced | MySQL, MariaDB, Redis, Elasticsearch, SQL |

LANGUAGES

English; French; Russian; Ukrainian