Vadim Volodin

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Experience

Software Engineer at Huawei, Saint Petersburg, 7/2020 - present

Developing a software analysis tool which automatically generates unit tests for C and C++. Supervising students' projects. Using C++, clang tooling, klee, grpc, typescript, gtest.

Software Engineering Intern at Jetbrains, Saint Petersburg, 9/2019 - 6/2020

Developed a library for tracking screen objects in video. Screens are one of the most popular objects to track. After tracking, the content of the screen can be changed. I used computer vision algorithms, OpenCV, Python.

Software Engineering Intern at Synopsys, Saint Petersburg, 1/2019 – 6/2019

Boosted Stereo Block Matching algorithm for Synopsys processor 112 times. Stereo Block Matching is the algorithm for estimation of the distance to objects on images. Technologies: C language, MetaWare OpenCL, SIMD, VLIW

Junior Software Engineer at AiFactory, Sochi, 7/2019 - 8/2019

Implemented efficient graphical effects for text rendering for Snapchat cameos. Snapchat cameos allow a user to change the actor's face with their face and customize the text. I developed it with C++, OpenGL, OpenCV

Software Engineering Intern at Micran, Tomsk, 7/2018 – 8/2018

Developed the plugin for testing radar engines using C++, Qt. It included user interface on Qt, communication with the engine via SPI protocol and the logic for testing.

Junior Software Engineer at Webim, Tomsk, 10/2018 – 12/2018

Webim's system gathers messages from different social platforms in one place. I Integrated messages from Vkontakte wall comments into the system. Technologies: Python, JavaScript, VK API and Linux.

Education

Saint Petersburg State University, Saint Petersburg Bachelor's degree / Software Engineering, 2016 - 2020 Master's degree / Software Engineering, 2020 - 2022 System Programming department

Computer Science Center, Saint Petersburg Software Engineering, 2017 - 2020

Technical Skills

Experience in Software Engineering, Data Science.

- Main technologies: C++, Clang Tooling, Linux, Python, OpenCV

- Data Science: Numpy, Pandas, Sklearn, Pytorch, XGboost
- Tools: Intellij Idea, Git, Svn, Travis, CircleCI, Cmake, Maven, AWS, docker
- Web: Html, Css, JavaScript, ReactJS, Bootstrap
- Other: Qt, Java, Spring MVC, Postgres, MS SQL Server, C#, Win API, Haskell

Projects

AI-DO / practicum at Computer Science Center, Jetbrains Research, 9/2018 – 12/2018

AI-DO is an olympiad focused on self-driving cars, which was conducted at NIPS by the Duckietown community. Our Jetbrains Research team took 4th place. I configured an environment in Linux and designed an algorithm for detecting lanes on the road. Used technologies are Python and OpenCV

Code Racing / Russian AI Cup, 11/2015

It is a competition where a participant needs to control a car in a simplified environment. I developed an algorithm which took 168^{th} place out of 1600. I used C++ for coding.

Secret Santa / practicum at Computer Science Center, Yandex, 2/2018 – 4/2018

A web application to play Secret Santa game. I developed the frontend using ReactJS along with html, css.

Avosya / Epam Data Science Hackathon, 12/2017

We presented a recommendation system to suggest online courses on issues from StackOverflow, written in Python using pandas, numpy, sklearn, and word2vec.

Vadim Wants Home / VKontakte Hackathon, 11/2018

A mobile application to help homeless pets to find their home. Worked at Vkontakte hackathon. I implemented the server on python.

Student Book, fall 2015

Platform for studying lectures consequently with self-testing, written in Java.

<u>Awards</u>

Codeforces: rating is 2017 (Division 1) **ACM ICPC Quarterfinal in Saint Petersburg**: 30th (2016), 28th (2017), 20th (2018) **Vkontakte hackathon Vezdekod:** top 2% (2020) **AI-DO:** - self-driving robots competition at NIPS 4th place with Jetbrains Research team.

Schools

MIPT ACM ICPC Workshops, Moscow, fall 2016, spring 2018 Recent advances in algorithms, Saint Petersburg, 2018