

Ilya Smirnov

Software Engineer

Yerevan, Armenia

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Skills

Python OOP, design patterns, asyncio / mp, pytest, data (numpy, scipy), aiohttp/asyncpg/aioRedis, pdb, cProfile
Go net/http, grpc, database/sql, concurrency, sync, pprof
Tech AWS, AWS CDK, MQ - SQS, ActiveMQ, RabbitMQ, Docker, ELK, Bash (awk, ssh), Shell, Bitbucket, Bamboo, SQL, Sentry, Splunk
Math statistics, discrete math, probability theory, computational geometry

Achievements

Projects

2022 - 2023 Developed an infrastructure framework for new workflow in cloud powered by AWS step functions (Golang) *Align Technology*
2020-present Liner Bot - all-in-one helpful companion for residents with more than 5'000 users (Python, asyncio, web) *own project*
2019-2022 Developed algorithms and tools in Python for geometric medical objects quality checks *Align Technology*
2017 Developed a quality assurance automation system (Python, bash, Qt) *RFD*
2011-2014 Developed algorithms for Atlas software *TOGI*

Mentoring

2020-2023 **Mentor**, Mentoring and reviewing students projects at Algorithms Course (Python) *Yandex.Practicum*

Writing

2015 **Patent**, Author · Operations control method for reservoir flooding *RU2565313C2*
2016 **Article**, Author · Uncertainty Quantification for Development Planning of a Large Field *SPE-182008-MS*

Certificates

2023 Certified in Golang Advanced *Yandex.Practicum*
2019 Certified in Python Programming *Python Institute*
2017 Python and mathematics for data analysis (MITP) *Coursera*

Experience

Sep. 2018 - Present **Align Technology Inc.**
Yerevan, Armenia
Expert Developer

- Develop web services, tooling, infrastructure and CI, create a variety of tools to automate processes (Python, GO, AWS)
- Responsible for R&D and leading the geometry quality team for the Invisalign FAB 3D simulator
- Work in an agile, distributed team with developers (US, Spain, Germany, Canada), and production engineers (Mexico)

Sep. 2014 - May. 2018 **Rock Flow Dynamics**
Moscow, Russia
Senior SDET

- Responsible for QA of tNavigator 3D simulator, building the QA process from scratch
- Provide HPC testing and GPU-based solution performance testing, as well as training and consulting support worldwide

Nov. 2010 - Jul. 2014 **TOGI LLC**
Tyumen, Russia
3D oil and gas fields modelling engineer

- 3D modeling and petrophysical simulation, including data analysis, history matching, and forecasting.

Education

2006-2011 **Tyumen State University, Institute of Math and Computer Science**
Tyumen, Russia
M. Sc. Thermal Physics