Dariia Vyshenska, Ph.D.

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PROFESSIONAL EXPERIENCE

Software Engineer, *SmoothSail (smooth-sail.github.io)* 🔗 2023 – present
SmoothSail is a feature flag management platform that enables developer teams to release/rollback features with a toggle and create reusable segments for targeting users during canary and ring rollouts.
- Led development and implemented a RESTful API and a CRUD application, leveraging ORM libraries for ACID-compliant data management to meet user demands.
- Architected and built a scalable event-driven communication channel between SmoothSail components by leveraging the NATS JetStream message broker.
- Designed and implemented real-time event notifications using EventSource API and server-sent events to optimize server performance, accommodating a higher application load.
- Enhanced app security by incorporating an SDK key encryption that supports 500 authorization requests per second.
- Designed UI to facilitate the use of SmoothSail by non-technical stakeholders.
- Authored a comprehensive case study detailing engineering challenges and solutions: smooth-sail.github.io/case-study 🔗
- Worked with a remote team of 4 developers across the US using an agile workflow.

Software Engineer, *Self-employed* 2020 – 2023
Developed personal and open-source applications. Selected projects:
- *CatchPost:* Tool for debugging webhooks (DO Droplet, Nginx, MongoDB, PostgreSQL, Node.js, Express, React).
- *Mahno*: A collaborative skill-sharing tool tracking team support dynamics (Ruby, Sinatra, PostgreSQL, ERB).
- *MiniMarket*: An e-commerce shopping cart (React, Express, Node.js, MongoDB).

Data Scientist, Postdoctoral Research Fellow, *DOE Joint Genome Institute* 2019 – 2023
- Led the development of an innovative HPC Microbiome data analysis pipeline for the IMG/M web portal.
- Handled 3 multi-disciplinary collaborative projects to generate and analyze high-throughput genomic data, which led to 2 peer-reviewed publications.
- Represented the Metagenome quantitative SIP program at the JGI Triennial Review of Science and Operations; created and coordinated the JGI Journal Club with cross-functional research teams.

Computational Biologist, Graduate Research Assistant, 2014 – 2019
College of Pharmacy, Oregon State University
- Created scientific software tools (Python, R), including those tailored for execution on HPC clusters, to enhance the efficiency of data analysis workflows.
- Managed 3 collaborative projects with cross-functional teams from Norway, Brazil, and the US, which led to 4 peer-reviewed publications.
- Led a team of 3 undergraduate students that won 9 awards and scholarships with $25,700 in total reward.

SKILLS

Programming Languages & Frameworks: Ruby, JavaScript, TypeScript, Go, Python, R, Bash, SQL, HTML/CSS, Sinatra, Ruby on Rails, Express.js, Jest.
Technologies & Tools: Node.js, jQuery, React, Sequelize.js, HTTP/HTTPS, SSE, OOP, ERD, ORM, REST APIs, PostgreSQL, MongoDB, Conda, Bioconductor, Git/GitHub, Docker, Nginx, Postman.
Systems & Platforms: Linux/Unix, HPC, Digital Ocean, AWS, Heroku, Slurm, SGE.
Other: Statistical Analysis, Data Mining, Big Data, Network Analysis, Data Visualization, Scientific Writing.

EDUCATION

Ph.D. - Pharmaceutical Sciences, Biological Data Science, 2014 – 2019
Oregon State University

M.S. - Biophysics, *Taras Shevchenko National University of Kyiv* 2008 – 2010