

Vladimir Loskutov

FULL STACK ENGINEER

Germantown, Maryland, 20874

✉ vladimir@enginerd.io | 🏠 enginerd.io | 📧 en9inerd | 🌐 vloskutov

Summary

- Experienced Full Stack Developer with expertise in Angular, NestJS, LoopBack, and Express.js, adept at integrating diverse data sources into seamless systems
- Proficient in Python and experienced in developing and maintaining software within AWS-based data warehouse infrastructure
- Experienced in building robust microscopy image processing pipelines, implementing API wrappers, and developing Angular components for efficient lab samples data management
- Proven track record of optimizing applications, automating processes, and contributing to the success of projects through effective collaboration and innovative problem-solving

Skills

Programming Languages	JavaScript/TypeScript, Python, C/C++, Bash
Frameworks	Angular, NestJS, LoopBack, Express.js, FastAPI, Django
Databases	MongoDB, PostgreSQL, MySQL, Redis, SQLite
Web	HTML, CSS, Tera, Liquid, XML
AWS Services	EKS, EC2, S3, DynamoDB, RDS, Redshift, VPC, IAM, ElastiCache, Lambda, Parameter Store
Miscellaneous	Git, Docker, Zola, Jekyll, LaTeX

Work Experience

Axle Informatics

Rockville, MD

SENIOR FULL STACK DEVELOPER

Jan 2023 - Present

- Developed Angular app based on previously developed library for lab sample data management, featuring dynamic hierarchy-based visualization of data organization using OMERO as source of data and metadata
- Integrated Angular app with existing OMERO ingestion pipeline, allowing direct imports of images into OMERO central repository
- Developed microservice using FastAPI and OMERO BlitzGateway package to retrieve OMERO data by provided metadata (map annotations) and access data from OMERO database that is otherwise inaccessible through existing OMERO API
- Dockerized applications and implemented CI/CD pipelines using GitHub Actions workflows; managed deployments on Amazon EKS with Helm charts, ensuring scalable and reliable application delivery

SOFTWARE DEVELOPER

Feb 2020 - Jan 2023

- Enhanced robust microscopy image import and processing pipeline in NestJS application, utilizing BullMQ for task queuing and Redis for caching
- Developed NestJS API wrapper around OMERO API and OMERO CLI, facilitating transformation of OMERO objects into internal project entities and enabling seamless import of microscopy images from private directories to OMERO central repository
- Developed Angular library (collection of components and services) responsible for lab sample data management, providing dynamic hierarchical metadata-driven data organization, various layouts for tree representation, and data grouping by various properties
- Built API with Loopback framework and internal company packages/libraries to operate with tree-based structure of lab sample data, providing ability to use different hierarchies (level sets), and incorporating role-based and user-based access control
- Re-implemented Node.js CLI app with oclif framework that processes 2d and 3d Electron Microscopy data to provide Client Credentials Flow instead of Authorization Code Flow and brings new client requested features
- Participated in upgrading legacy Angular app and back-end Node.js app: adapted for supporting multiple databases (SharePoint and MySQL) through LoopBack Juggler; re-implemented Angular components according to client's requirements; built REST API with LoopBack framework

Burson Cohn & Wolfe

Washington, DC

SOFTWARE ENGINEER

Jul 2019 - Feb 2020

- Developed serverless app based on AWS Lambda (Node.js back-end), AWS Cognito, AWS API Gateway, AWS S3 (JavaScript front-end) to manage and collect records in DynamoDB for further data extraction and analysis by using AWS Glue and Amazon Athena
- Developed Python package for interfacing with NewsWhip and SimilarWeb APIs, and created reports leveraging this package for comprehensive data analysis of news and web traffic trends

- Developed and maintained software for social intelligence analytics using Django, PostgreSQL (Redshift), and Facebook and Twitter APIs
- Automated AWS, including Automating Big Data processing with Python and Boto3
- Data Warehousing based on Amazon Redshift
- Reduced company's monthly bill for Redshift dramatically
- Built and deployed Docker containers to break up monolithic app into microservices, improving developer workflow, increasing scalability, and optimizing speed
- Supported and developed Redshift report that generates hundreds of thousands of dollars of revenue per year
- Practiced Scrum development methodology and Test Driven Development

Verifeed LLC

Washington, DC

SOFTWARE ENGINEERING INTERN

Sep - Dec 2016

- Developed and maintained software for social intelligence analytics using Django and Bootstrap
- Created and maintained tools for report generation using Django, PostgreSQL, and Git
- Practiced Agile Development and Test-Driven Development methodologies

Angstrom-Telecom

Moscow, Russia

JUNIOR NETWORK ENGINEER

Sep 2014 - May 2015

- Tested embedded network devices (SoC RTL89xxC) running OpenWrt using self-written Bash scripts and iptables
- Identified and fixed bugs in C/C++ codebase, maintained using Git
- Worked with RTL8188C/8188CU/8188CUS, RT8192C/8192CU Wi-Fi chips, RS-232 interface, and U-Boot bootloader
- Debricked network devices through JTAG, Serial console
- Enhanced web interfaces using HTML, CSS, and JavaScript
- Prepared technical documentation for network equipment using MS Office

Ltd. QDGroup

Moscow, Russia

TECHNICAL SPECIALIST

Jul 2011 - Aug 2014

- Maintained local office network and set up office software and equipment
- Configured and managed Windows and *nix servers, and network hardware
- Utilized RS-232 and RS-485 protocols for debugging, debricking, and firmware updates of network devices
- Installed and maintained Apollo Security's Access Control and Alarm Monitoring System (APACS); handled firmware updates and controller configurations
- Configured and managed PBX hardware and Asterisk PBX software

Personal Projects

TeleBuilder[GitHub Repo](#)

TELEGRAM API, TYPESCRIPT, GRAMJS

Jul 2022 — Present

Simple command message-centric Telegram bot framework, acting as additional abstraction layer built on top of GramJS

TgEraser[GitHub Repo](#)

PYTHON, TELEGRAM API, TELETHON

March 2019

CLI tool to delete all user's messages from chat, channel, or conversation on Telegram without requiring admin privileges

PlacerSA[GitHub Repo](#)

C/C++, STL, GLUT, BATCH SCRIPTING

Nov 2014 — May 2015

Placer for standard cell placement (global and detailed) based on modified algorithm "simulated annealing" for VLSI and FPGA

Education

National Research University of Electronic Technology

Moscow, Russia

MASTER OF SCIENCE DEGREE IN COMPUTER SCIENCE AND ENGINEERING

2015

National Research University of Electronic Technology

Moscow, Russia

BACHELOR OF SCIENCE DEGREE IN ELECTRONICS AND MICROELECTRONICS

2013