Meri Khurshudyan

(718) 552 –7640 | merikhurshudyan41@gmail.com | NJ/NYC | GitHub.com/Hi-Tree

TECHNICAL SKILLS

Programming languages: C++ (proficient) , Java (proficient) , Python (proficient), JavaScript, Ansible
Web Technologies: HTML5, CSS, ReactJS, Bootstrap, Spring, SpringBoot, Apache Tomcat
Database Technologies: MySQL, Oracle SQL, QuestDB, RDS, NoSQL, MongoDB
Cloud Technologies: AWS, Azure, Google Cloud, VMware
Certificates: Azure Fundamentals AZ 900
Tools: Git, GitHub, VSCode, Oracle, Postman, WireShark, PowerFlex, HPSA, AutoSys

Publication: **"**About size distribution of particles adsorbed to a spherical whispering-gallery-mode resonator in sensing experiments*"* By Vladimir Shuvayev, Meri Khurshudyan and Lev Deych.

EDUCATION

Queens College, City University of New York (CUNY) New York, NY
B.A. in Physics | GPA: 3.4/4.00 Dec 2020
M.S. in Physics concentration in Photonics | GPA: 3.7/4.00 Jan 2024
B.S. in Computer Science | GPA: 3.7/4.00 Jan 2024

RELEVANT EXPERIENCE

Wells Fargo New York, NY
Full Stack Software Engineer: Jun 2022 – Apr 2024

- Developed Python web application using Django framework for custom ETL creation using JSON payload.
- Created REST APIs with django to establish UI and database connectivity via HTTPs and SSL.
- Used MongoDB to store app configurations and password cipher files for DB schemas.
- Created statistics UI with Oracle Apex and custom JS for compliance status reports.
- Developed Oracle-procedure emailing system to notify Product Owners of non-compliance status.
- Helped create CI pipelines using Jenkins to auto test git commits with blackduck and sonarqube.
- Helped create CD pipelines using Jenkins to commit code changes to UAT.
- Conducted unit testing with pytest and performance testing with Jmeter.
- Created Bash script to monitor CPU usage and Memory usage during ETL processes.

Software Automation Engineer:

- Packaged and deployed RHEL Linux layered products using Ansible for maintenance automation.
- Created CD pipelines using Python to automate promotions between environments.
- Created server build software using Python and bash for one-click deployment of test servers for QAs.
- Supported server build product to end of its lifecycle.

Nokia of America Corporation New Providence, NJ
Optical Network System Software Engineer AI/ML CO-OP Jan 2022 – May 2022

- Proposed an Architectural diagram for ML model deployment using UML diagrams.
- Developed Python based data warehousing pipelines to fetch data from Kafka, clean and store into QuestDB.
- Created Decision-Tree based ML model to predict fiberoptic channel health based on time series data.
- Implemented the concept of continual learning and model improvement.
- Automated channel switching and alerting based on ML model predictions with 93% accuracy.

Queens College - National Science Foundation Grant New York, NY
WGM Optics Scientific Python/C++ Researcher Jan 2020 – Jan 2024

- Used the theory of "Scattering of Light by Small Molecules" and Lorentz Force law to calculate the Whispering Gallery Mode (WGM) optical and non-optical forces acting on a free particle.
- Developed a computational simulation using numerical methods to solve ordinary differential equations.
- Collected, cleaned and treated output data from the simulation for statistical analysis.
- Designed and executed null hypothesis testing using python and statistical methods to analyze the distribution and significance of key data metrics, resulting in a discovery of a natural phenomena.
- Coauthored in a publication that was published in Optica magazine. (see above)

PROJECTS

Rewriting the code Survey Monkey, Software Engineering Student Aug 2021 – Dec 2021

- Developed a web-based survey system in a team of 4 using LAMP stack.
- Used AWS EC2 machine to host an Apache Tomcat servlet for Java web app.
- Helped design and normalize MySQL database schema hosted on a separate EC2 instance.
- Established frontend and DB connectivity via HTTPS with Java Rest APIs.
- Conducted unit testing with cucumber and performance testing with jmeter.