Yernur **Nursultanov**

· Software Engineer ·

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"The standard library saves programmers from having to reinvent the wheel." - Bjarne Stroustrup, C++ creator

Experience

Ford Motor Company, ltd — *Waterloo, Canada*

Software Developer Security — *Mar.2022 to Dec. 2024*

- Played key role in designing and implementing complex service level security components.
- Worked with downstream teams to determine software architecture and specifications.
- Conducted detailed code reviews to maintain code quality, increasing coverage above 99%.
- Implemented tools to allow a smooth bug isolation and correction exercise for successful release cycles.

First Mile Technologies — *Toronto, Canada*

Full Stack Developer — *Jun. 2021 - Aug.2021*

- Developed and implemented tools in C++ to analyze ancillary data from high-end production cameras.
- Worked directly with hardware vendors to integrate their HD-SDI Video Processor and capture card drivers.
- Built integration tests to ensure high-quality code in an Agile environment.

Seytech — *Chicago, US*

Full Stack Developer — *Jan. 2019 - May 2021*

- Designed and implemented RESTful APIs using Nest.js and Express.js.
- Increased application performance by 35% through pagination implementation.
- Improved development productivity by 25% with Material UI components.
- Initiated TypeScript usage across the codebase
- Implemented various frontend optimizations and features

BlackBerry QNX — *Ottawa, Canada*

Camera Research Software Engineer — *Jan. 2017 - Apr. 2017*

- Contributed software engineering expertise in the development of the new product features through the software lifecycle.
- Improved support for IP/GigE Vision camera services for ADAS 2.0 sensor fusion framework.
- Resolved low/medium/high priority tickets in robust and POSIX compatible C/C++.
- Optimized buffer management for image post-processing by adding synchronization of timestamps directly from cameras' drivers and thus improving memory management.
- Implemented the real-time Max-Point ratio configuration option that allows dynamic frequency tuning of LiDAR data.
- Automated testing and environment setting with bash scripts to reduce examination time and testing overhead.

Latest Projects

CHOMP - Diet Monitoring

- Designed and built a website that allows monitoring nutritional intake
- Working on porting the simulator to a web app using Django and Bootstrap's CSS for the frontend part
- Implemented budgeting feature for meal planning and eating out using Python
- Designed and implemented database architecture for product nutrients in PostgreSQL

ProPlanner - Choice Sorter app

- App improves users productivity by removing the component of decision making
- Developed with Golang and Gin-Gonic http framework for routing, GORM for interacting with Postges DB
- Developed frontend using NodeJs with Bootstrap's CSS
- Future Direction: Implementation of browser extension

Post Office System Simulator

- Made a Java Swing driven application that simulates post office systems
- The application usesModel View Controller design pattern to interact between the inner parts or views
- Simulator works by injecting a command, a script or an executable, that loads list of action into the system
- Worked on design a system for study of advanced scheduling techniques for delivering logistics in Pandemic environment

Education

SFU(Simon Fraser University)

B.S. in Software System

Sep. 2014 - Dec. 2018

Skills

- Algorithms
- Compilers
- Data Analysis
- Cryptography
- Embedded Systems
- C/C++, Java, Python
- AFL-Fuzz, GDB, DLT
- Multimedia
- Probability Theory
- Web Information System