Dariia Kucheruk

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Education	National University of "Kyiv-Mohyla Academy", BS September 2019 – June 2023, graduated **with honors** **Major**: Computer Sciences **Key courses**: Object-Oriented Programming, AI, Information Retrieval **GPA 95**
	The University of Toronto, BS Exchange student May 2022 – April 2023

Skills

Programming Languages/Technologies	Operating Systems	Frameworks/libraries	Application/Web Servers
▪ Golang ▪ Python ▪ Haskell ▪ C++ ▪ Java **DBMS** ▪ PostgreSQL ▪ MS Access **Methodologies** ▪ Agile, Scrum	▪ Windows ▪ macOS ▪ Linux (Ubuntu) **Version Control systems** ▪ Git **Package managers:** Go Modules, govendor	▪ net/http ▪ k8s.io ▪ Gorilla/mux ▪ Apache thrift ▪ justinas/alice ▪ Go.elastic.co/apm ▪ Encoding/json ▪ Embed ▪ bindata ▪ Spf13/cobra ▪ spf13/pflag ▪ gomock ▪ Testify	▪ Traefik ▪ Apache **Documentation** ▪ Godoc ▪ Markdown ▪ OpenAPI (Swagger) ▪ ThriftAPI **Infrastructure** ▪ Docker ▪ Docker-Compose ▪ Kubernetes ▪ Helm ▪ AWS

Experience

Research at the University of Toronto

Project Description:	Analyzing the MRI Data from Premature Neonates
Involvement Duration:	13 months
Project Role:	Machine Learning Researcher at Professor Michael Brudno's lab
Contributed:	▪ Analyzed brain MRI data from pre-term neonates, utilizing Machine Learning methodology to identify key features that indicate future developmental outcomes. ▪ Built a new segmentation model based on training on partially labeled data to boost the original model performance ▪ Solved the black box problem of the retrieved outcome prediction using SHAP values and analytic tools. ▪ Created a preprocessing pipeline to normalize data and perform inhomogeneity bias field correction.
Project Team Size:	10 team members
Tools & Technologies:	Python, Tensorflow, Jupyter

Backend for Networking Product

Project Description:	Adaptive security appliance software.
Customer:	SoftServe
Involvement Duration:	6 months
Project Role:	Software Engineer
Contributed:	▪ Wrote an internal plugin, which improved the troubleshooting process and solved duplication issues. ▪ Performed refactoring on a job, leading to its best-effort behavior in the upgrade scenario. ▪ Updated Helm templates which resulted in pure and simple logic without code duplication. ▪ Participated in code investigation and the creation of design documentation which reduced onboarding costs and improved understanding of the project`s functionality.
Project Team Size:	48 team members
Tools & Technologies:	Golang, Helm, Kubernetes, Docker, AWS, Bash

Backend for Product Analytics Platform

Project Description:	Backend for a web platform that was created to deliver financial analytics to clients.
Customer:	SoftServe
Involvement Duration:	6 months
Project Role:	Software Engineer
Contributed:	▪ Performed refactoring by removing a redundant service which led to grand maintainability improvement of services and more advanced architecture ▪ Refactored inner services functions resulting in easier testing and readability. ▪ Wrote Unit Tests and raised test coverage up to 80% on each service.
Project Team Size:	25 team members
Tools & Technologies:	Golang, MySQL, PostgreSQL, Docker, Traefik, Apache Thrift

A Platform for University IT Department

Project Description:	Develop a documentation management system that automizes the process of scholarships assignment, calculating students' GPAs and collecting other statistical data
Customer:	University IT Department
Involvement Duration:	6 months
Project Role:	Software Engineer, Team Lead
Contributed:	▪ Developed a customized PDF parser which made the process of scholarship assignment much easier for the IT department. ▪ Implemented REST API which provided a great deal of flexibility to the project. ▪ Wrote SQL queries and optimized data retrieval. ▪ Developed and maintained service architecture which ended up being accurate and suitable for the task.
Project Team Size:	3 team members
Tools & Technologies:	Go, HTTP, PostgreSQL https://github.com/dariiakucheruk/DBsummer

Development of various Informational Retrieval Systems as a university project (Golang)

Duration	5 months, **Golang** was used for development
Contributed:	Created fast programs to concurrently build Indexes and Vocabulary. Used VBE to encode collected data. Developed a solution to build clusters of data. Used various data structures to store vocabulary