

MOR Software

Position: Java Developer

PERSONAL INFORMATION

Name: Kat Nguyen	Address: Danang, Vietnam
Gender: Female	YoB: 1991

SUMMARY

I possess a robust and diverse background in software development, spanning R&D, Java backend development.

I have hands-on experience with a wide array of technologies and programming languages, including Java, Python, JavaScript, and related frameworks/libraries.

My professional journey includes working in various environments, from large outsourcing companies to product-based companies (Multiplier Technologies, Makino).

Notably, I have demonstrated leadership skills through team management and mentoring of junior developers. I also have experience working with distributed systems, microservices, and cloud computing (AWS).

EDUCATION & CERTIFICATES

People's Friendship University, Moscow, Russia

06/2015

Bachelor of Fundamental Information Science and Information Technologies

SKILLS

- **Programming Languages:** Java, C, C++, Python, JavaScript, SQL
- **Backend Development:** Java Spring (Spring Boot, MVC, Security), RESTful APIs, GraphQL, gRPC, Microservices, JPA, Hibernate
- **Frontend Development:** ReactJS, GraphQL
- **Database & Storage:** PostgreSQL, Kafka, HDFS, HBase
- **Cloud & DevOps:** AWS, CI/CD (Jenkins, GitHub Actions, GitLab CI), Docker, Linux Server Management
- **Messaging & Event Streaming:** Kafka
- **System Architecture & Design:** Scalable System Design, High-Performance and Secure Architecture

- **Machine Learning & Image Processing:** OpenCV, TensorFlow, Keras, Tesseract OCR, Neural Networks, Transfer Learning, Feature Extraction (HAAR, HOG)
- **IoT & Embedded Systems:** ROS, DDS, MicroXRCE, Raspberry Pi, ESP32
- **Big Data & Distributed Systems:** Hadoop (MapReduce, Hive, Sqoop)
- **Tools & Other Technologies:** Git, GitHub, GitLab, Docker, Oracle Service Bus (OSB)

WORKING EXPERIENCE

MOR Software JSC

Feb 2024 – Present

Senior Java Developer cum Technical Leader

- Provide mentorship and expertise to team members.
- Assist in scoping, architecture, and estimation.
- Lead development of scalable and robust architectures.
- Coding
- Ensure code quality and adherence to standards.

Outsourcing Company

2019 – 2024

Senior Java Developer

FPT Software

2015 – 2019

R&D Developer

MAIN PROJECTS

❖ **Happy Money**

(Feb 2024 – Mar 2025)

Project description	<p>Happy Money is a platform that provides personal loans for credit card debt consolidation, partnering with credit unions to offer lower-interest, transparent, and customer-focused financial solutions. It aims to reduce financial stress and promote responsible borrowing.</p> <p>Key functionalities:</p> <ul style="list-style-type: none"> + Processing loan applications, assessing creditworthiness, and integrating with credit bureaus and financial partners. + API connectivity with credit unions, banks, and financial institutions for seamless loan funding and servicing.
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	+ Supports ACH payments, direct debit, and scheduled loan repayments with real-time transaction tracking. + Customer portal with loan tracking, payment scheduling, and financial wellness insights.
Number of participants	8 members
Position	Java Developer cum Technical Leader
My responsibility	<ul style="list-style-type: none"> • Mentor junior developers and contribute to knowledge sharing within the team. • Develop backend logic using Java frameworks (Spring, JPA). • Participate in designing application architecture and database structure. Ensure the application's scalability, security, and performance are met. • Write technical documentation and API specifications. • Write unit and integration tests using JUnit, Mockito. • Ensure continuous integration and deployment (CI/CD) using Jenkins, GitHub Actions, or GitLab CI.
Technologies applied	<ul style="list-style-type: none"> • ReactJS (FE), Java Spring, PostgreSQL, Kafka, AWS

❖ **HRM Platform - Microservices for payment flow**

(Feb 2022 - Feb 2024)

Project description	<p>An employment platform that enables companies to hire, pay, and manage international employees and contractors without setting up local entities. By handling compliance, payroll, taxes, and benefits across multiple countries, the platform simplifies global workforce expansion for businesses.</p> <p>Main functions:</p> <ul style="list-style-type: none"> + Handles the creation, approval, and payment of invoices for freelancers hired through the Multiplier platform + Processes bank files from various vendors, converting them into the platform's standardized format for seamless transaction handling. + Allows a company to pay salary to its employees in any country in the world via 3rd party vendors such as HSBC, Wise, etc.. + Provide authentication and authorization services as the first security layer of the whole platform.
Number of participants	8 members

Position	Java Developer cum Technical Leader
My responsibility	<ul style="list-style-type: none"> • Mentor junior developers and contribute to knowledge sharing within the team. • Implement APIs (RESTful, GraphQL) and integrate third-party services. • Participate in designing application architecture and database structure. • Optimize code for performance, memory management, and efficiency. • Work with front-end developers, DevOps, and QA teams to ensure smooth development.
Technologies applied	<ul style="list-style-type: none"> • React, GraphQL, Java Spring, PostgreSQL, Kafka, GRPC, AWS

❖ **Payse, user-service - contributor**

(Feb 2022 - Feb 2024)

Project description	<p>Payse is a payment micro-service, which allows a company to pay salary to its employees in any country in the world via 3rd party vendors such as HSBC, Wise, etc..</p> <p>User service is a micro-service to provide authentication and authorization services as the first security layer of the whole platform.</p>
Number of participants	6 members
Position	Java Developer cum Technical Leader
My responsibility	<ul style="list-style-type: none"> • Mentor junior developers and contribute to knowledge sharing within the team. • Develop backend logic using Java frameworks (Spring, JPA). • Perform code reviews to ensure best practices, coding standards, and security. • Participate in designing application architecture and database structure. • Write unit and integration tests using JUnit, Mockito.
Technologies applied	<ul style="list-style-type: none"> • React, GraphQL, Java Spring, PostgreSQL, Kafka, GRPC, AWS

❖ **Core-service - maintainer**

(Feb 2022 - Feb 2024)

Project description	Core service is the core module of the Multiplier platform, which handles all HR processing burdens such as law, HR policies, vacation benefits,
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	insurance, taxes, etc. of staff in every country over the world. Using this platform, a company could hire employees remotely without worrying about law compliance.
Number of participants	6 members
Position	Senior Java Developer
My responsibility	<ul style="list-style-type: none"> • Develop backend logic using Java frameworks (Spring, JPA). • Participate in designing application architecture and database structure. • Write unit and integration tests using JUnit, Mockito.
Technologies applied	<ul style="list-style-type: none"> • React, GraphQL, Java Spring, PostgreSQL, Kafka, GRPC, AWS

❖ **MicroXRCE DDS**

(Jul 2020 – Nov 2021)

Project description	<p>The R&D project aims to evaluate the feasibility of integrating MicroXRCE into the DDS domain and implementing Firmware Over-The-Air (FOTA) updates. Ongoing R&D testing is being conducted on Raspberry Pi 4 and ESP32.</p> <p>Main functions:</p> <ul style="list-style-type: none"> + Implements the DDS-XRCE (Data Distribution Service for eXtremely Resource-Constrained Environments) standard, enabling DDS communication on embedded systems. + Seamlessly integrates with standard DDS (e.g., Fast DDS, Cyclone DDS, RTI Connext) for distributed system communication. + Compatible with RTOS (Real-Time Operating Systems), Linux, Windows, and bare-metal environments.
Number of participants	8 members
Position	R&D Engineer
My responsibility	<ul style="list-style-type: none"> • Research & Feasibility Study • System Architecture & Design • Implementation & Prototyping • Documentation & Reporting
Technologies applied	<ul style="list-style-type: none"> • C, C++ 20, Python, Java • Python, ROS (Robot Operation System), DDS (Data Distributed System)

❖ i-Assist/Makino Application Platform

(Jul 2019 – Jun 2020)

Project description	<p>A strategic long-term initiative aimed at enhancing factory automation by leveraging IoT and robotics to optimize manufacturing processes, improve operational efficiency, and enable real-time data-driven decision-making. This project focuses on seamless machine-to-machine communication, predictive maintenance, and autonomous production workflows to drive innovation and reduce manual intervention.</p> <p>Main functions:</p> <ul style="list-style-type: none"> + Tracks machine status, utilization, and performance metrics in real time. + Optimizes production planning by automating task assignments based on machine availability. + Supports connectivity with IoT devices for data-driven manufacturing processes. + Provides real-time alerts for anomalies, reducing downtime and improving response times.
Number of participants	10+ members
Position	R&D Engineer
My responsibility	<ul style="list-style-type: none"> ● Research & Feasibility Study ● System Architecture & Design ● Implementation & Prototyping ● Documentation & Reporting
Technologies applied	<ul style="list-style-type: none"> ● C, C++, Python, Java ● ROS (Robot Operation System), DDS (Data Distributed System)

❖ DENSO OTX/ODX

(Sep 2017 – May 2019)

Project description	<p>Develop and integrate ISO OTX (Open Test sequence eXchange) and ISO ODX (Open Diagnostic Data Exchange) standards to enhance Firmware Over-The-Air (FOTA) capabilities for car's firmware. This implementation aims to streamline diagnostic processes, improve remote firmware updates, and ensure compliance with automotive industry standards. By leveraging structured test sequences and standardized diagnostic data,</p>
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	<p>the solution enhances efficiency, reliability, and scalability in firmware deployment and maintenance.</p> <p>Main functions:</p> <ul style="list-style-type: none"> + Supports both graphical flow-based design and script-based test case creation. + Facilitates interaction with Electronic Control Units (ECUs) for automated testing and diagnostics. + Provides detailed execution logs and debugging tools for troubleshooting and validation. + Enables automated validation of ECU firmware updates, reducing manual effort.
Number of participants	7 members
Position	Java Developer
My responsibility	<ul style="list-style-type: none"> • Write clean, maintainable, and efficient Java code. • Participate in designing application architecture and database structure. • Identify and fix bugs in the application. • Analyze and resolve performance issues in Java applications.
Technologies applied	<ul style="list-style-type: none"> • System implementation based on ISO 22901 standards • JDK SE 7, JNI, C

❖ Deep Clinic, OCR

(Nov 2015 – May 2019)

Project description	<p>Related fields: Image processing, machine learning.</p> <p>Algorithms: Color extraction, edge detection, convolution neural networks, transfer learning.</p>
Number of participants	10 members
Position	R&D Developer
My responsibility	<ul style="list-style-type: none"> • Research & Feasibility Study • System Architecture & Design • Implementation & Prototyping • Documentation & Reporting
Technologies applied	<ul style="list-style-type: none"> • OpenCV 3.x (for Python), Tesseract, Keras, Tensorflow.

❖ **ADAS System**

(Jan 2016 – Nov 2017)

Project description	Develop Automotive Car Surround-view application, object detection application. Related fields: Image processing, machine learning. Algorithms: Bird-view transformation, HAAR and HOG features extraction, SVM training model, cascade training model.
Number of participants	7 members
Position	C++ R&D Developer (Dev 3 - Mid-senior - by internal ranking)
My responsibility	<ul style="list-style-type: none"> ● Research & Feasibility Study ● System Architecture & Design ● Implementation & Prototyping ● Documentation & Reporting
Technologies applied	<ul style="list-style-type: none"> ● STL C++ 14, OpenCV 3.4 and Qt 5.7

❖ **PPHontai**

(Jan 2016 – Aug 2016)

Project description	Built an Android application making product delivery process become semi-automated, based on the customer's framework.
Number of participants	8 members
Position	Java Developer
My responsibility	<ul style="list-style-type: none"> ● Write clean, maintainable, and efficient Java code. ● Participate in designing application architecture and database structure. ● Identify and fix bugs in the application. ● Analyze and resolve performance issues in Java applications. ● Work with front-end developers, DevOps, and QA teams to ensure smooth development.
Technologies applied	<ul style="list-style-type: none"> ● Java, SQL and XML.

❖ Recommendation System

(Nov 2015 – Jan 2016)

Project description	Implemented and maintained recommendation system based on Hadoop platform with Map-Reduce, HDFS (Hadoop Distributed System) and Hbase storage.
Number of participants	5 members
Position	Java Developer
My responsibility	<ul style="list-style-type: none"> • Write clean, maintainable, and efficient Java code. • Participate in designing application architecture and database structure. • Identify and fix bugs in the application.
Technologies applied	<ul style="list-style-type: none"> • Java, Hive, Sqoop, and Python.

❖ OSB

(2015)

Project description	This is the first time I took a job. Though it lasted only almost 3 months, thanks to the developers here, I got some basic server management skills in Linux. Those skills are really helpful in my career.
Number of participants	5 members
Position	System Integration Developer
My responsibility	<ul style="list-style-type: none"> • Set up and maintained systems using Oracle Service Bus (OSB). • Study and apply Docker to build a general working environment for developers.
Technologies applied	<ul style="list-style-type: none"> • Linux, Docker