Roman K.
Senior Software Developer

SUMMARY

An adept software engineer with a Master's in Informational Technologies emphasizing embedded systems and cross-platform development. Extensive experience utilizing C++, Microsoft Visual Studio, Windows SDK, and various protocols (TCP/IP, HTTP, SNMP, IPP, USB). A proven track record of deploying innovations like AI-driven tools and robust driver installation systems, leading to significant improvements in performance metrics. Armed with technical mastery over development environments, frameworks, and a keen understanding of the software development lifecycle, this engineer excels in creating solutions that enhance user experience and operational efficiency.

TECHNICAL SKILLS

Main Technical Skills	C/C++/C# (5 yr.), Winforms (3 yr.), Robot Framework, TCP/IP (2 yr.)
Programming Languages	Python
C++ Libraries and Tools	C/C++/C# (5 yr.)
JavaScript Frameworks	Express, MERN stack (MongoDB, Express, React, Node), Node.js, React
JavaScript Libraries and Tools	p5.js
Python Libraries and Tools	Robot Framework
Security	GPO (Group Policy Object)
Databases & Management Systems / ORM	MongoDB
Azure Cloud Services	Azure Arm templates
Deployment, CI/CD & Administration	Azure Arm templates
Third Party Tools / IDEs / SDK / Services	GDB, Visual Studio (4 yr.)
Version Control	GitHub
Mail / Network Protocols / Data transfer	HTTP (2 yr.), TCP/IP (2 yr.), WebRTC
Virtualization, Containers and Orchestration	KVM (for Kernel-based Virtual Machine)

Operating Systems	Linux, Windows, Windows Phone
Methodologies, Paradigms and Patterns	MVC
Scripting and Command Line Interfaces	PowerShell, Shell Scripts
Platforms	STM32
UI/UX/Wireframing	UI/UX
SDK / API and Integrations	Winforms (3 yr.)
Other Technical Skills	ACF, for Kernel-based Virtual Machine, framework, Group Policy Object, InfVerif, Spring model-view-controller

WORK EXPERIENCE

Gaming Software Developer, Drone Operator Simulator

Duration: March 2019 – May 2020
Summary: Developed an ASCII-based rendering engine for a drone operator simulator game, enhancing player immersion and maintaining high performance in text-based graphics.
Responsibilities: Created ASCII-based rendering engine, employed advanced rendering techniques, optimized drone operation mechanics, integrated complex algorithms for gameplay, built and debugged using Microsoft Visual Studio 2013.
Technologies: C++, Microsoft Visual Studio 2013, Rendering Techniques, Windows Console, Shell Interpreter, CLI

Software Developer, Norton Commander Analogue

Duration: September 2020 – January 2022
Summary: Built a Norton Commander analogue file management system, improving operational efficiency with comprehensive system-level file access and streamlined file operations.
Responsibilities: Developed file manipulation system, leveraged Windows Kernel, utilized Shell libraries, integrated a Shell Interpreter, created advanced filtering and searching capabilities.
Technologies: C++, Microsoft Visual Studio, Windows SDK, Windows.lib, Shell.File.lib, Shell.dll, CLI / Windows Terminal, Windows Kernel, PowerShell

OS Software Developer, Printer Driver .INF Installator

Duration: January 2022 – April 2023
Summary: Engineered a comprehensive, automated printer driver installation process, enhancing installation speed, accuracy, and user satisfaction.
Responsibilities: Developed an automated driver installation process, integrated with Windows Applications Catalog, implemented robust file encryption, and created custom GUI features.
Technologies: C++, Microsoft Visual Studio 2022, Windows SDK, Windows MessageDialogBox GUI, Device Stack API, PrintUI, InfVerif, UAC Control, CLI / Windows Terminal

Firmware Developer, Distant Remote and Control Printer System

Duration: December 2023 – December 2024
Summary: Automated printer maintenance processes and developed a remote control system for printers, improving efficiency and client experience.
Responsibilities: Automated printer maintenance, enabled remote print job control, gathered printer diagnostics, and developed client-server architecture for secure data handling.
Technologies: C++, Windows SDK, Windows Message-based IPC, TCP/IP Architecture, SNMP Protocol, IPP Protocol, USB Protocol, Shell Interpreter, PrintUI, Custom JSON Parser

Full-Stack Developer, AI-Enabled Learning Path

Duration: September 2024 – Present
Summary: Implemented a feature-rich online compiler and AI code reviewer for an AI-enabled learning platform, effectively increasing code submission efficiency and user engagement.
Responsibilities: Implemented online compiler, integrated AI code reviewer, introduced confidential scanning module, utilized multi-layer authentication protocols, and optimized compiler performance.
Technologies: C/C++, HTML, CSS, HTTPS, TCP/IP, Neural Networks, Deep Learning, Machine Learning

EDUCATION

- **Master's degree in Informational Technologies of Computer Engineering**
  September 2017 - June 2023