KONSTANTIN KIFISHIN

LEAD SOFTWARE DEVELOPER/GPU ARCHITECT

Any for remote work
+817040714306
me@kifishin.pro

ABOUT ME

Highly skilled and motivated Senior Software Developer specialized in programming and development, seeking full-time, part-time, or project-based remote opportunities. With expertise in a broad range of programming languages and technologies and a primary focus on C++ (13 years) and C# (6 years), I bring versatility, depth, and years of experience to the table. I am available for immediate start and open to travel anytime to work.

EDUCATION

ENGINEER DEGREE IN SOFTWARE DEVELOPMENT
State Social University(MGSU/RGSU) Institute of Information Technology / 2010

LANGUAGES

- ENGLISH
- JAPANESE
- RUSSIAN

LINKS

Linkedin:
http://www.linkedin.com/in/konstantin-kifishin-3798bb35

Web:
https://kifishin.pro/

REFERENCE

JASON GRAD CEO
Massive Inc
E: jason@joinmassive.com

SKILLS

C++	C#
FINANCE(STOCKS/CRYPTO/INDICATORS/EA)	MULTITHREADING
NETWORK/SOCKETS	BIOMETRIC AUTH
IMAGE RECOGNITION/PROCESSING	PYTHON
RUST	REST/WEB
GPU(CUDA/OPENCL) OPTIMIZATION/DEVELOPMENT	MOBILE DEV(XAMARIN/NATIVE): IOS/ANDROID
DATABASES: NOSQL,MSSQL/MYSQL,ORACLE	AI: LLAMA2,PATHFINDING,DECISION MAKING
GUI: QT/WXWIDGETS/WINFORMS,IMGUI,CEGUI	GRAPHICS: OPENGL/DIRECT3D/VULKAN

WORK EXPERIENCE

EXTERNAL PROJECT
Jan 2018 - Nov 2023

Software developer[Finance]

Developed a specialized financial software that seamlessly downloads historical data spanning 10 years from InteractiveBrokers and KuCoin, encompassing stocks, futures, and cryptocurrencies like BTC,ETH and others. The software skillfully generates the Heiken Ashi indicator from this data, followed by the creation of Renko bars, supporting three distinct types of Renko with adjustable retention. It proficiently calculates and estimates profit/loss and various financial ratios, aiding in strategizing simple yet effective trading methodologies. Additionally, the software is equipped with features for rating investments, fetching detailed information about companies, including upcoming dividend dates, and spotlighting notable companies based on the data analyzed. It also streamlines the process of adding or removing companies from the user's investment portfolio.

MASSIVE INC
Jan 2020 - Oct 2023

Lead software developer[Crypto/web3]

Developed a comprehensive adblock system that functions as a DNS server.
Engineered a load balancer for cryptocurrency mining operations, designed to limit resource usage to 40%, evade antivirus detection, and minimize interference with user computer resources.
Created a self-updating module system capable of handling issues like non-starting, freezing, or crashing modules.
Implemented a residential proxy client that receives data via WebSocket, establishes secure HTTPS connections from the user's machine, and relays data back to the server.
Integrated interoperability with YOLO3 and a WebSocket rerouting server, enabling clients to send image recognition requests over the network for quick responses.
Utilized libUV and file systems for IPC communication, enhancing module communication efficiency compared to the traditional socket system.
Conducted extensive SDK improvements focusing on code quality and resolving thread-related issues.
Learned Docker and developed a simple tool in C# to streamline deployment on the Akash web3 network for virtual machines.
Enhanced skills in Rust, Python, and C# while working on various applications.

WEBCAMERAPRO
Jan 2018 - Jan 2020

Lead Software developer[CCTV/AI]

Integration and Enhancement of YOLO Neural Network: Implemented advanced integration and setup for the YOLO neural network, incorporating hardware acceleration and Nvidia's neural network version for efficient video detection. (C++, YOLO)
Development of Movement Detection System: Engineered a movement detection module with noise filtering capabilities using OpenCV. (C++, OpenCV)
Construction of IP Camera Search Module: Developed a module for searching IP cameras, leveraging ONVIF technology. (C#, C++, ONVIF)
Video Data Filtration System: Created a system for capturing video from various sources, segmenting them into smaller fragments, and saving them as files. (FFmpeg, C, C++)
YouTube Integration for Video Uploads: Integrated with Google's YouTube.v3 for uploading captured videos, with additional resume and settings functionality. (C#, C++)
RTSP Streaming for YouTube Live: Implemented RTSP streaming to support live video uploads to YouTube. (FFmpeg, C++)
C++/C# JSON Bridge: Developed a bridge for JSON data interchange between C++ and C#.
API Development for C++/C Projects: Created an API to facilitate use of the application from other C++/C projects. (C++, C)
'Streamer' Concept Implementation: Designed a 'streamer' concept to enhance performance and reduce memory usage. (C++)
Telegram Integration with TDLib: Integrated Telegram's TDLib for uploading videos to Telegram and setting up a Telegrab bot. (TDLib, C++)
Lua Script Engine Integration: Incorporated a Lua scripted engine into the application for enhanced functionality. (Lua, LuaJIT, C++)
Qt Framework Assistance: Assisted in integrating the Qt framework for frame output and transformation into QImage/shader paths. (Qt, C++, OpenGL)
WebSocket Server Development: Established a WebSocket server for unified communication with a web-based cutter and app. (C++)
XML File Management Module: Created a module for editing, sorting, and joining XML files. (C++, XML)
CorelDraw OLE Converter Development: Developed a converter for WMF to BMP using CorelDraw API. (CorelDraw API, C#)
Image Format Converter with GUI: Developed an image format converter manager with a graphical user interface. (C++, ImGui)
Live555 Restreamer Setup: Integrated and set up Live555 restreamer. (Live555, FFmpeg, C++)
NoSQL Database Integration: Integrated a NoSQL database into the system. (C++, EJDB)
Enhancements to EJDB: Added features to EJDB, such as row counting and timestamps, and improved search functionalities. (C++, EJDB)
Hardware Accelerated Image Processing: Added hardware-accelerated image processing using OpenCL and refined existing code. (C++, OpenCV)
OpenCV CPU YOLO Integration: Integrated OpenCV CPU version of YOLO. (C++, OpenCV)
Multi-OS Code Porting: Ported code to multiple operating systems including Linux, macOS, and Windows.
WebRTC Porting: Ported WebRTC with native WebRTC support and a portable web server.
Multithreaded Qt IP/Route Settings: Ported IP/route settings to a multithreaded Qt version. (C++, Qt)
Telegram Client Development in C#: Developed a Telegram client for authentication, group management, and video sending. (C#)
Auto Proxy Finder Tool: Created a tool for finding proxies (Socks4, Socks5, HTTP, Tor). (C#)

DOTRUNET.GROUP
Jan 2016 - Jan 2018

Lead developer[Biometrics/Mobile]

Developed a scalable TCP server with workers for biometric fingerprint recognition using SondaSDK, PostgreSQL, and Boost libraries. (C++, PqSql, Sonda SDK, Boost)
Created a client for fingerprint scanning, registration, and processing, compatible with various sensor software. (C++)
Developed an encryption protocol for the fingerprint scanning system. (C++, CryptoLib)
Engineered software to launch games on Windows 10 with a feature to block access when funds are depleted. (C++, SQLite, PqSql)
Developed an Advanced Messaging Delivery System (AMDS) for Windows and Linux, using WxWidgets and integrating a RestAPI. (RestAPI, C++, SQLite)
Ported AMDS from C++ to C# for Android platforms. (Xamarin, C#)
Developed a unified GUI render system for AMDS. (SkiaSharp, C#, Android Hooks)
Implemented various Android notification features such as vibration, LED, flashlight, and notifications. (C#, Android Notifications)
Ported AMDS to MonoDevelop for Linux Ubuntu. (C#)
Adapted AMDS for MacOS Sierra, incorporating monoMac and notifications. (C#, MonoMac, Notifications)
Ported AMDS to iOS10, integrating iOS services and hooks. (C#, iOS Services, iOS Hooks)
Developed an XMPP service/client for AMDS. (C#)
Integrated AES256 encryption into all versions of AMDS. (C#, BouncyCastle)
Added a barcode scanner feature to AMDS. (C#)
Implemented a signature system verification, including fingerprint, code, and camera, for AMDS. (C#)
Added various iOS notification features and integrated iOS push notifications and PushKit. (C#, iOS Notifications, PushKit)
Developed a TCP server client for a small Android game. (Android Studio, Boost, C++)
Adapted path-finding algorithms for a small Android game. (C++)

NPP-TRAINER
Jan 2013 - Jan 2016

Lead developer[3D/Decision making]

Freelance/ Remote woDeveloped car simulation software with advanced 3D rendering capabilities. (D3D11, C++) Video
Adapted VR Oculus Rift DK2 for use in car simulation software. (VRSDK, C++) Video
Created artificial intelligence for navigating cars and pedestrians in the simulation. (Bullet, C++)
Wrapped various physics engines for enhanced simulation dynamics. (Bullet, Havok, Newton, C++) Video
Implemented fast 3D grass rendering technology. (HLSL, D3D11, C++) Video
Optimized engine performance for low-end GPUs and added support for triple-monitor rendering. (C++)
Developed a detailed mountain road environment, including effects and 3D modeling. (3ds Max, D3D11, HLSL, C++) Video
Created the simulation's main menu and integrated a results storage system with MySQL. (C++ Builder, MySQL)
Implemented weather effects like snow and low-friction roads in the car simulation. (HLSL, D3D11, C++) Video
Developed an intersection navigation system for car AI. (Bullet, C++)
Created a level editor for the simulation. (D3D11, C++)
Developed a system for controlling passenger entry and exit in buses and trams. (C++) Video
Wrote interfaces to support another physics engine, Newton. (C++)
Developed an 'instructor remote system' to generate hazardous road situations on demand. (C++)
Created a dirty window cleaning effect for simulating rain on windshields. (HLSL, D3D11, C++) Video
Developed an application for adjusting car parameters. (C++, Ogre, AntTweakBar) Video
Implemented a license protection system with activation and authentication features. (UDP, C++)
Wrote a wrapper for OpenAL/cAudio to support 3D sound effects and positional audio. Video
Created an application for VR presentation control, including remote use, HTML reports, video playback, and monitor duplication. (C++) Video
Developed a Windows blocking system by terminating processes like Explorer and Task Manager.
Integrated SQLite into various projects.
Conducted research to identify PC components that reduce costs by up to 14%.
Integrated encryption and compression libraries AES (CryptoLib) and LZHAM into the engine.rk

FREELANCE
Jan 2010 - Jan 2013

Software developer

Developed an XML to MSSQL converter, efficiently translating XML data into a CSV format suitable for MSSQL databases. (C++, SQL, Qt)
Created an MSSQL (CSV) to Oracle (CSV) converter, facilitating data transfer and conversion between different database systems. (C++, SQL)
Transformed the converters into a standalone service application, enhancing usability and accessibility. (C++, Qt)
Adapted the service application for compatibility with Oracle databases, ensuring smooth integration and functionality. (C++, Oracle)
Implemented a UDP server to receive syslog messages from a remote device (SSPT-2), converting them into XML format for application processing. (C++, Socket)
Converted the UDP server into a standalone Windows service, streamlining its deployment and operation. (C++, Qt)
Developed a user remote desktop viewer, similar to TeamViewer and TightVNC, optimized for fast video streaming. (C++, GDI)
Wrote administrator interfaces for the desktop viewer, incorporating advanced features and controls. (C++, DirectX, Qt)
Developed software to read data from hardware inputs, convert units, solve equations, and build tables, with the capability to export these tables into Microsoft Excel using OLE. (C++ Builder)
Created a module designed to accelerate graph building and rendering on the screen, specifically for C++ Builder 6.
Developed a module to facilitate communication with COM ports using the ModBus protocol for C++ Builder 6.
Wrote a dynamic system capable of solving equations input at runtime, akin to script languages. This system allows users to input equations (e.g., y=x^2), generates simple bytecode, executes it over 2000 iterations, and then outputs the results to a database or on screen. (C++ Builder)
Developed a clone function for XMLtree specifically for StatViz/TemplateEditor, enhancing data manipulation and visualization capabilities. (C#, XML, Ogre, Direct3D)
Improved the GUI of an application to display the last entered data, enhancing user experience and data interaction. (C#, Ogre)
Created a weather decoder/parser system that downloads data from a server, parses it, inserts it into a database, and displays it on the screen. (C#, XML, MSSQL, Ogre)
Implemented a feature to parse words into a cylindrical form for dynamic display on screen. (C++, C#)
Developed a 2D game, showcasing engaging gameplay and physics interactions. Video (HGE, Box2D, C++)
Created a level editor for a 3D engine, enabling the design and customization of game environments. Video (Direct3D, PhysX, C++)
Developed software for soft interpolation between two animations, providing smoother and more natural animation transitions. Video
Implemented Occlusion Culling with both CPU and GPU implementations, optimizing rendering performance by not drawing hidden objects. Video (Direct Compute, HLSL, C++)

EXPERTISE HIGHLIGHTS

Concurrent Programming: STL, Boost, libCDS, .NET
Networking: TCP/UDP, DNS, Web Services
IPC Techniques: libUV, Sockets, File-based
Crypto/Web3: Mining, Node Operations, Payments
Financial: Trading Systems, Strategy, Data Analysis
Resource Management: CPU, GPU, Memory
Biometrics: Fingerprint, Facial Recognition
Video Tech: Streaming, ONVIF, Live555, FFmpeg
AI: Pathfinding, Decision Algorithms, Recognition
Security: Encryption, Secure Channels, AV Tactics
RESTful Services: Server and Client Development
GPU Programming: CUDA, OpenCL
Language Integration: Rust, Python, Lua
Web Technologies: HTTP/S, HTML, JSON, XML, CSS
GUI Development: QT, Wx, WinForms, ImGui, CEGUI