Aleksandr Potapov
Toronto, Ontario, Canada · Email: alexander.potapov.w@gmail.com · +1 416 709 0665
Github: https://github.com/MomoDeve · LinkedIn: https://linkedin.com/in/alexander-potapov

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SUMMARY
Software Engineer with **5+ years of experience** building **AI-first user-facing products** and **high-performance rendering systems**. Currently developing a next-generation spreadsheet/BI web application with AI-generated, auto-refreshable dashboards used by **thousands of daily users**. Previously shipped a **Vulkan rendering backend** for a large-scale flight simulator, including shader pipeline automation and GPU performance optimizations.

SKILLS
Frontend: TypeScript, SolidJS, React
AI: LLM systems, prompt engineering, LLM evaluation
3D Graphics: C++, Vulkan API, WebGPU, GLSL, SPIR-V toolchain
Other: Python, Parsing, DSLs

PROFESSIONAL EXPERIENCE
The Bricks, Inc - AI / Frontend Software Developer   **May 2022 – Present**
- Built core product features for an AI-first spreadsheet/BI web application: spreadsheet rendering engine, charts, tables, and other interactive visualization tools used by **100K+ total users**.
- Designed an algorithm for **AI-generated auto-refreshable dashboards**: users create dashboard widgets via AI data queries which run on their data in sandbox environment, with automatically tracked dependencies.
- Analyzed user interaction data and collaborated with product to redesign key workflows, increasing subscription conversion rate from **<1% to 6% within a year**.

Eagle Dynamics - 3D Graphics Software Developer   **August 2021 - May 2022**
- Implemented a **Vulkan rendering backend** to replace an older DirectX 11 one; improved performance by **~15% on average** and enabled adoption of modern rendering features (render-graph approach, modern shaders).
- Created an automated pipeline converting legacy **FX/DirectX shaders to SPIR-V**, saving dozens of hours during migration.
- Optimized GPU memory allocation and usage; leveraged buffer sharing and texture memory aliasing to reduce VRAM usage by **~10%**.

Nanosemantics Lab - C++ / Python Software Developer   **October 2020 - June 2021**
- Migrated a handwritten C parser to **Lark (Python)**, reducing the parsing codebase by **2x+** and accelerating feature development.
- Extended a custom chatbot DSL with **conditionals, loops, and function calls**, enabling more complex interaction logic; benefited **60%+** of company customers.

EDUCATION – BACHELOR'S DEGREE
National Research University, Higher School of Economics (HSE Moscow)   **2020-2024**
- Major: Software Engineering, Computer Science Faculty

OPEN SOURCE PROJECTS
- MxEngine – 3D game engine (author), **1.2K+ stars** / Deferred rendering, PBR, physics, runtime code reload.
- Graphics Developer Roadmap – curated graphics programming resources (maintainer), **1.2K+ stars**.
- AngouriMath - C# symbolic math library (co-author**), 800+ stars /** Evaluation, simplification, analytic solving**.**