Dylan Perks CV

Personal details removed for public CV
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Personal Statement

A keen, driven developer with a passion for software quality and longevity, I have a natural flair for computer science having developed an advanced skillset through self-education and networking throughout the last 10 years. Contributing to some of the most well-known projects within their respective fields, I have and continued to demonstrate excellence within programming and adaptability to learn new technologies, ensuring I always bring the right toolset and skills to the task at hand.

Key Skills

- Proficiency in a variety of software toolchains
  - 2 years' experience working with Rust for embedded development.
  - 4 years' experience working with C++ in both embedded development and high-performance contexts (using GCC, Clang, and MSVC).
  - 8 years' experience working with C#/.NET in both high-performance and GUI contexts.
  - Additional experience with Python, Lua, SQL, Java, and JavaScript.
- Demonstrated excellence in a wide range of scenarios.
  - Embedded/Systems Programming (including Linux Yocto-based projects)
  - Low-level, high-performance GPU graphics and compute.
  - Cross-platform, widely deployable developer technologies/libraries.
  - Additional experience with HTTP/web applications and mobile applications.
- Leading engineer on customer-facing projects, with direct customer liaison.
  - Requirements analysis based on specifications provided by customers.
  - Designing & developing software based on customer data.
  - Keeping in close contact with customer representatives, actioning feedback as necessary.
- Knowledgeable with several team collaboration/DevOps software suites.
  - Git tooling: GitLab, GitHub, BitBucket
  - Team collaboration: Jira, Confluence
  - CI/automation: GitLab CI, Jenkins, Azure DevOps
- Contributed to well-known projects in their respective fields.
  - The Microsoft .NET Platform – enterprise-grade cross-platform/web development toolchain.
  - The OpenGL Specification – acting as a community specification editor for downstream projects.
  - 3300+ other contributions on GitHub – https://github.com/Perksey

Experience

L3Harris TRL Technology – Software Engineer (Sept 2020–July 2023)
Temp. Apprentice (Sept 2020-April 2022), Permanent FTE (April 2022-Present)

L3Harris is a multinational technology company & one of the largest defence contractors globally. I worked in the Intelligence & Cyber International division, producing a variety of electronic warfare and cybersecurity solutions for the UK government and its allies.

Responsibilities

- Designing and developing software components within large embedded systems against system requirements derived from customer input.
- Leading customer-funded collaborative projects, producing software to customer specifications and keeping in regular communication with customer representatives.
- Developing modular electronic warfare software development platforms and cybersecurity solutions built to high-grade security-critical customer standards.
- Maintaining critical Test Automation software used for systems testing of high-grade products.
- Working as part of a large, multi-discipline (software, systems, FPGA) team; coordinating & collaborating with the team on software development tasks.
- Running regular inter-project catchups to facilitate communication between the various project software teams within the department, and cross-pollination of the efforts and discoveries therein.

Notable Achievements

- Pioneered the Rust programming language and championed the integration of Rust into the internal software ecosystem; pushing the business to use Rust following this. As a result of my work, the company has moved to shift most of its cybersecurity bids to use the Rust language.
- Led the design & development of software symmetric & asymmetric key management/infrastructure simulators against customer specifications. By exploiting modern technology and building high-quality abstractions to accelerate both the production of such tooling and their future agility & reusability within the department, this project took only 6 months and provides strategic opportunities for future development.
- Represented L3Harris at an industry day by delivering a presentation on side-channel analysis in a forum in which both customer and competitor representatives were in attendance.
- Completed an apprenticeship while in this role.

Freelance & Open-Source Software Development (March 2018-Present)
Doing business as Ultz Limited (March 2018-January 2022), developing for the .NET Foundation thereafter.

In early 2018 I established Ultz Limited as a platform for collaborative freelance and open-source development. Under this umbrella I acted in a freelance capacity and led the development of bespoke solutions with a small team of 2-3 people, while also continuing the open-source development Ultz was best known for. Most notably, I spearheaded the creation of Silk.NET – a high-performance GPU graphics & compute library with 74+ contributing software developers and used by hundreds of downstream projects. This was later acquired by the .NET Foundation – Microsoft's open-source umbrella – with whom I continue to develop open-source software, concluding the operations of Ultz Limited.

Responsibilities

- Championed the development of multiple client solutions comprising of Android applications, HTTP APIs & administration portals, and desktop GUI applications.
- Managing Silk.NET community outreach to a large userbase, encompassing industry professionals from well-known companies such as Microsoft, Activision Blizzard, and HP to name a few.
- Orchestrating and managing a team collaboration infrastructure to efficiently work as a distributed team and remain in healthy communication.
- Employing consumer-centric strategies to ensure continuity and seamless compatibility of open-source software, catering to the diverse needs of the numerous stakeholders a large userbase has accrues.

Notable Achievements

- Successfully secured financial sponsorship for Silk.NET through JetBrains' Open-Source Power-Ups program, solidifying its position as a recognized and supported project, while leveraging this partnership to further enhance the development and publicity of the Silk.NET library.
- Awarded the coveted Microsoft Most Valuable Professional (MVP) award in the developer technologies category for the outstanding technical & community leadership I provide in the open-source space.
- Effectively orchestrated the transfer of intellectual property rights for Silk.NET to the .NET Foundation, spearheading all necessary communications with the involved community stakeholders, ensuring a smooth and transparent transition process.
- Fostered a culture of knowledge-sharing and growth within the Silk.NET community by providing mentorship and upskilling opportunities to enthusiastic volunteers, enabling them to evolve into proficient maintainers of the Silk.NET library.
- Served as one of the three maintainers of OpenTK – a low-level C# graphics library similar to Silk.NET with a greater focus on legacy applications in which I spearheaded significant ongoing modernisation efforts.

Honours & Awards
- **2 x Microsoft Most Valuable Professional (MVP) Award** (2022-2023, 2023-2024) – "With just over 3,000 awardees worldwide, Microsoft MVPs represent a highly select group of experts. MVPs share a deep commitment to community and a willingness to help others. MVPs are technology's best and brightest". Awarded in the Developer Technologies category.

Education
- UK Level 3 Software Development Apprenticeship (Distinction)
- UK Level 3 Cert. Programming / Software Development Context & Methodologies (2x Distinction)
- 10 GCSEs ranged G7-G4 (A-C)

References

Available on request