Dylan Perks

Software Engineer
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Worcester, United Kingdom

Highlights

- 8+ years' public portfolio with 3300+ GitHub contributions
- 3+ years' professional experience with C#, C/C++, and Rust
- Bachelor's Degree (BSc Software Engineering, WGU Texas)
- 4 x Microsoft Most Valuable Professional (MVP) Awards

Core Proficiencies

- Network and systems programming using C/C++ and Rust including Linux targets.
- Strong leadership owing to a rich open-source portfolio coordinating distributed teams of contributors.
- Backend development using C#/.NET.
- Software design incorporating networking and encryption.
- Scripting and automation using Python, with GitHub/GitLab CI integration.
- Teamworking and collaboration, both face-to-face and using tools such as Teams, Jira, Git, and GitLab.

Additional Skills

- SQLite
- OpenGL
- DevOps
- WPF
- Cloudflare Workers
- iOS
- Java
- Vulkan
- WASM
- MAUI
- Win32
- Go
- Android

Experience

2025: Software Engineer – QinetiQ (Full-Time)
Global Grade 11 – Malvern, UK

Working in the cybersecurity portfolio at QinetiQ, I am responsible for designing and developing future cryptographic key management solutions and emulators for over-the-network symmetric key distribution for IKEv2 tunnels.

- Collaborated as part of cross-industry initiatives and directly engaged with customer/authority representatives on a day-to-day basis.
- Acted as a subject matter expert for the integration, testing, and reference of specific equipment under a government program.
- Developed symmetric key distribution emulators and contributed designs for symmetric key export software.
- Led the design & development of a distributed actor pattern library and plugin system in Rust, with emphasis on enabling modular software & future extensibility. Produced a React/TypeScript application integrating with a Rust WebAssembly module using that work.

2020-2023: Software Engineer – L3Harris Technologies (Full-Time)
Eng C (2020-2022), Eng D (2022-2023) – Tewkesbury, UK

Working in the Intelligence & Cyber International division at L3Harris – a global military & cybersecurity contractor – I was responsible for writing software for electronic warfare (EW) and network security (NS) solutions for the UK government and its allies.

- Designed & developed software components for embedded (Yocto/Linux) EW/NS security-critical systems using Rust, C#, and C++.
- Collaborated as part of a multi-discipline (software, systems, FPGA) team using GitLab, Jira, and Jenkins.
- Lead maintainer of critical Test Automation software used across NS projects in Python.
- Led the design & development of software symmetric & asymmetric key management infrastructure simulators implementing customer specifications for PKIX, CMS, and other VPN key packaging RFCs against a bespoke network-based (TCP, UDP) Hardware Security Module.
- Pioneered the Rust programming language and championed the integration of Rust into the internal software ecosystem. As a result of my work, the company has moved to shift most of its cybersecurity bids to use the Rust language.
- Represented L3Harris at a notable British government technical forum comprising customer & competitor representatives, presenting on side-channel analysis in cryptography.

Achievements

Silk.NET

Created Silk.NET – a high-performance, low-level graphics and compute library with 4400+ stars and 74+ contributors, later acquired by Microsoft's .NET Foundation from the Ultz umbrella I operated from 2018 until 2022.

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.

Solely designed & developed Autobook TX, an automated Texas Driver's License appointment scheduler for iOS and WebAssembly with a backend in Cloudflare Workers. Developed SoundPrints, a freelance project for scanning NFC tags on 3D waveforms and playing the corresponding sound using Xamarin Android and ASP.NET Core.

Education & Awards

- **2022-2024** Bachelor's of Science in Software Engineering – WGU – Dallas, Texas (2023-2024), DMU – Leicester, UK (2022-2023)
- **2024** AWS Certified Cloud Practitioner
- **2022-2024** 3 x Microsoft MVP Awards
- **2020-2022** Level 3 Software Dev. Tech. Apprenticeship (Gloucestershire College)

Open Source & Media

- **2023** C# + WebAssembly + OpenGL = ?
- **2024** L3Harris Engineering Award
- **2021** JetBrains OSS Webinar: Silk.NET
- **2019** https://github.com/dotnet/Silk.NET
- **2018** https://github.com/opentk/opentk

Extended portfolio available at https://perksey.com/portfolio.

References available upon request.