

NAME

Will Boyce - Professional Geek

SYNOPSIS

wrboyce [--developer] [--devops] [--hacker] [--open-source] [--other]

DESCRIPTION

Will, a versatile software engineer with over 20 years of experience, specialises in backend development, DevOps, and security; excels in building highly scalable, fault-tolerant systems, and transforms complex requirements into robust, production-grade software solutions. Will drives technical excellence, leads cross-functional teams, and delivers enterprise-grade infrastructure for IoT, mobile, and cloud-based platforms. He promotes open-source contributions while fostering knowledge sharing and community engagement. As an experienced remote worker and team leader, Will manages distributed teams and orchestrates cross-functional collaboration across time zones. He functions as both a valuable individual contributor and an empowering Tech Lead / Manager, delivering results with precision, pragmatism, and purpose.

OPTIONS**--developer**

Expert Python engineer with well over a decade of experience, possessing deep knowledge of the standard library and language internals. Experienced in developing Python extensions using C. Deeply familiar with the Django web and Django REST frameworks.

Highly skilled in Go development, with both hobby and commercial open-source projects widely adopted by the community.

Deep understanding of JavaScript/TypeScript/Node.js, specifically working with backend services and client-side applications.

Passionate Erlang developer with many years of experience building scalable and resilient systems, most notably in the telecommunications industry. Keen interest in all things BEAM, including modern languages such as Elixir.

C enthusiast with moderate experience developing a variety of applications and systems from operating systems, embedded systems, and microcontrollers, to Linux kernel modules.

Knowledgeable of various flavours of Assembly; ARM, AVR, Intel, and familiar with the relevant internal workings.

Enjoys exploring and mastering new technologies that can add value to development and infrastructure.

--devops

Strong advocate for Infrastructure as Code (IaC), with extensive experience using Terraform and OpenTofu to design, automate, and manage capable, scalable, and secure infrastructure. Skilled in leveraging modern tools and best practices to streamline deployments and optimise cloud environments.

Extensive experience with AWS, and well versed in GCP, specialising in architecting and managing robust, scalable, and cost-effective cloud solutions tailored for diverse business needs.

Comprehensive expertise in Docker, including a deep understanding of internals, programmatic image generation, and development of custom container runtimes tailored to specific use cases.

Highly proficient with GitHub Actions, with a proven track record of designing intricate workflows, developing custom actions, and optimising CI/CD pipelines for maximum efficiency and reliability.

--hacker

Ardent practitioner of computer security & forensics; passionate reverse engineer who enjoys practical security research. Frequent success in boot2root/ctf/security/osint challenges such as [cryptopals](#), [microcorruption](#), and [VulnHub](#).

--open-source

Authored and published a variety of open source projects such as [ec2hashcat](#), [huanan](#), [Sirious](#), [mkproject](#), [PlexHeadend](#), and [Erb](#) - along with Balena's [sshproxy](#), and [VPN](#) solutions.

Contributor to various widely-adopted open source projects such as [pfSense](#) and [Django](#).

Avid supporter of [The Free Software Foundation](#), [The Apache Software Foundation](#), [The Python Software Foundation](#), and [The Open Rights Group](#).

--other

Hobbyist photographer, keen baker, passionate pitmaster, amateur maker, and wobbly cyclist.

HISTORY

- * Founding Engineer @ Volentio Group (2021 - 2024)
Co-founded a tech-forward consultancy with two complementary partners, delivering innovative solutions across diverse industries. Key projects include:
 - Architected and developed a bespoke financial management platform for crewed private yachts, addressing niche market needs. Utilised Terraform/OpenTofu extensively to design and deploy secure, scalable cloud infrastructure, ensuring reliability and compliance exceeding industry standards.
 - Designed and implemented a smart voicemail solution for power users, leveraging Python, AWS, and advanced AI technologies to streamline call management. Played a key role in automating infrastructure provisioning and scaling using Terraform/OpenTofu.
 - Developed firmware for a cutting-edge smart home device utilising mmWave and IR for human presence detection alongside ambient sensors for environmental monitoring and automation, aimed at advancing home automation technologies.
- * Senior Software Engineer @ Balena (November 2016 - October 2020)
Focused on optimising and enhancing core infrastructure solutions, contributing to both proprietary and open-source projects while driving platform reliability and scalability. Key responsibilities and achievements included:
 - Owned and enhanced the VPN solution, significantly improving performance, reliability, and scalability for tens of thousands of IoT devices, resulting in enhanced customer satisfaction and operational efficiency.
 - Maintained and enhanced the proprietary proxy product, implementing new features while improving performance, reliability, and user experience.
 - Key role in infrastructure management and improvement, assuming DevOps and Site Reliability Engineering (SRE) responsibilities to streamline operations, improve system resilience, and support scalable deployments.
 - Championed the open-sourcing initiative, driving the strategic release of core components such as [sshproxy](#) and [open-balena-vpn](#). Collaborated across teams to ensure code quality, usability, and strong community engagement.
 - Worked closely with customers to understand technical needs, design tailored solutions, and align technical delivery with product strategy.
- * Senior Software Engineer @ 3S Mobile (January 2012 - August 2016)
Spearheaded a Django-based platform with Android mobile apps, focusing on security, custom mobile sync solutions, and data warehousing for agricultural clients.
 - Engineered scalable backend and mobile solutions, supporting secure, traceable data workflows.
 - Built sync functionality optimised for low-bandwidth networks,

enhancing data integrity in challenging connectivity conditions.

- * Flamboycent Limited (April 2010 - 2024)
Founded an entrepreneurial consultancy with a focus on security analysis, secure application development, and solving complex technical challenges.
Key projects included:
 - Security principal for a cross-platform messaging solution featuring end-to-end encryption, deployed within the banking industry.
 - Led the development of an Erlang-based teleconferencing solution integrated with FreeSWITCH, delivering unique features and an accompanying iPhone application.
 - Built a Node.js proxy with a Riak backend to secure sensitive data leaving corporate networks, enabling safe and compliant cloud integration for a Fortune 500 client.
 - Developed a GeoDjango-based "gig finder" platform, integrating Facebook and Google Maps APIs to connect users with local events, showcasing advanced geospatial data processing and intuitive user interfaces.
- * Software Engineer @ VORARI (January 2008 - December 2011)
Delivered consulting services for managed cloud and collaboration platforms, including multi-server deployments and system migrations.
- * Lead Developer @ Newsco Insider (November 2007 - April 2010)
Led development of internal and external web applications for digital publishing, alongside on-site infrastructure management for a multi-office environment.
- * Technical Lead @ National Clamps (November 2006 - October 2007)
Responsible for infrastructure upkeep and development of bespoke software solutions, including automation tools for parking enforcement.
- * Freelance Developer (May 2004 - November 2006)

FAQ

- * Do you have any references?
Yes, references are available on request.
- * What's with the weird layout?
The design of this page is heavily inspired by [Unix Man Pages](#) because they are a time-proven format for formatting documentation (*and the idea appealed to my inner geek*).
- * Is this document available in other formats?
Yep! A PDF is available [here](#).
- * Are you available for work?
Most probably! [Get in touch](#) and I'm sure we can work something out.
- * Will you relocate to ...?
Most probably not, I'm afraid; I have commitments that cannot be moved. I am, however, well versed in working as part of, and orchestrating, a geographically distributed team (with over 15 years' experience).

SEE ALSO

[Github](#), [Bluesky](#), [Keybase](#), [LinkedIn](#), [Stack Overflow](#), [Security Blog](#)

PGP Key: [ECE2 4D2B B628 9DB7 7A22 B114 4E27 760A 8590 3481](#)

Contact

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