Warith AL Maawali

Technology Executive & Cybersecurity Leader

Creator of Kodachi OS · Founder of Vooum · Digital Forensics, Linux Privacy & Security R&D

Muscat, Sultanate of Oman

digi77.com/contact digi77.com/founder/#consult digi77.com

linkedin.com/in/warith1977 github.com/WMAL

PROFILE

I build technologies that make privacy, security and complex technical research more accessible.

My career spans 30 years across cybersecurity, digital forensics, research and development, and technology leadership. I combine executive experience with hands-on software engineering: I led a 40-member technical team and a national digital forensics laboratory at ONS, founded and ran Eagle Eye Digital Solutions, and led cybersecurity and R&D at National Security Services Group (NSSG), an Omani cybersecurity company now part of Dreamlab Technologies, before serving as its Deputy CEO and Acting CEO, where I led the company to Cybersecurity Company of the Year and was named one of Arabian Business's Top 50 CEOs of 2023.

Today I build and run five systems, led by Kodachi OS, the privacy-focused Linux operating system I have developed since 2013 and whose core Rust code I still write. TechRadar has ranked it the #1 Linux distribution for privacy and security six years running, 2020 to 2025.

KEY NUMBERS

30
years in cybersecurity, forensics and R&D
since September 1996

5
systems built and run today
Kodachi OS, Vooum, om77.net, digi77.com, Avoid Coinomi

20
recognitions
TechRadar, Arabian Business, OER and more, 2020 to 2025

49
published articles
digi77.com, 2013 to 2026

40
member technical team led
ONS research and development

170,000+
members on om77.net
more than 7.7 million posts since 2001

EXECUTIVE IMPACT

Across three organisations, two of them with 50+ employees, I developed strategies and built projects no competitor offered, each tied to its organisation's growth. At one of them I turned around revenue, market position and talent. At the others, my work included confidential government programmes.

OMR 500K
single major project secured
at one organisation, whose annual revenue had been OMR 2,000

#1
Cybersecurity Company of the Year
OER 2023 and Muscat Daily 2024, under my leadership

3
organisations, senior leadership roles
strategy and unique projects behind each one's growth

50+
employees
in two of the three organisations

The turnaround at one organisation

	Before	After
Commercial scale	An OMR 100 project, OMR 2,000 annual revenue	A single project worth OMR 500,000
Market position	A name no one mentioned	Award-winning market leadership
Talent	No applicants, and few knew the company	Strong candidates competing to join

Leadership record

- At NSSG, now part of Dreamlab Technologies: rose from Chief Cyber Security and R&D to Deputy CEO and Acting CEO, and led the company to Cybersecurity Company of the Year (OER 2023, Muscat Daily 2024) and Excellence in Building National Talent in Cyber Security (Muscat Daily 2024)
- Strategic partnerships under my leadership: Group-IB (memorandum signed at GISEC Global 2024, Dubai), Resecurity, and Risk Associates for PCI DSS in Oman's financial sector
- As Acting CEO of NSSG: strategic planning, system architecture, information security and vendor management
- Arabian Business Top 50 CEOs of 2023
- As founder of EEDS: a global client base within a few years of launch, including several sectors in Oman

How it was done

- **Commercial growth.** Business development, new revenue streams and contract negotiation that took one organisation from an OMR 100 project to a single project worth OMR 500,000.
- **Financial accountability.** Budget ownership, with projects delivered on time and within budget.
- **Talent and culture.** High-performance teams built on continuous learning; at one organisation, strong candidates competed to join a company no one had applied to before.
- **Quality and governance.** Quality assurance and information security enforced in delivery, with SLA management, as a project worth OMR 500,000 demands.
- **Strategic innovation.** Projects competitors did not offer, and the strategies behind them, from research and development, each aligned with its organisation's growth, including confidential government programmes.

AREAS OF EXPERTISE

- Cybersecurity strategy and team leadership
- Digital, mobile and internet forensics
- Linux privacy and system hardening
- Penetration testing and security auditing
- Research and development management
- Secure software engineering (Rust, Bash, PHP, Python)
- Privacy networking: VPN, Tor, encrypted DNS
- System architecture, server and cloud management
- Stakeholder, vendor and contract management
- Compliance, SLAs and business process assessment
- AI assisted engineering and algorithmic trading research
- Technical writing and public speaking

THE SYSTEMS I BUILD AND RUN TODAY

Kodachi OS (since 2013), Creator and developer

A privacy-focused Linux operating system I started in mid-2013 and first released as Linux Kodachi on 20 October 2013. It brings together VPN and Tor routing, encrypted DNS, system hardening and a live security dashboard. Kodachi OS 10 is based on Debian 13 with a Rust core: I write the core Rust stack and sign every release. TechRadar ranked it the #1 Linux distribution for privacy and security six years running, 2020 to 2025.
kodachi.cloud · source: github.com/WMAL/kodachios

Vooum (since 2026), Founder

A trading-signal system built on trading strategies I have developed since 2017, automated with its own website since August 2026: Bitcoin and Ether strategies race through eight years of real prices, are checked live, and publish sealed paper signals. Backtested and paper results are not actual trading performance and do not guarantee future results. Not financial advice.
vooum.com

om77.net (since 2001), Founder

The Omani community platform (الساحة العمانية): forums, blogs, galleries, files and a calendar. More than 7.7 million posts and 170,000 members.
om77.net

digi77.com (since 2005), Author

My research and publishing system, online since July 2005: cybersecurity, Linux, Rust, Bash, automation and technology leadership, with source-code examples and the archive of my earlier projects. 49 published articles.
www.digi77.com

Avoid Coinomi (since 2019), Investigator

An evidence archive documenting my investigation into the handling of wallet recovery phrases during Coinomi desktop restore testing: network captures, the on-chain trail and SHA-256 hashed files for readers to examine. Maintained since 2019.
avoid-coinomi.com

CAREER

Independent technology projects, Muscat, Oman

Founder & Developer Jul 2005 to present

I build and run my own privacy, security and research systems alongside my employment: digi77.com since July 2005, Kodachi OS since mid-2013 (first released 20 October 2013), the Avoid Coinomi case file since 2019, and Vooum, whose trading strategies I have developed since 2017 and automated with its own website since August 2026.

National Security Services Group (NSSG), now part of Dreamlab Technologies, Muscat, Oman

Deputy CEO and Acting Chief Executive Officer Sep 2022 to Dec 2024

Chief Cyber Security and R&D Jan 2020 to Sep 2022

Rose from Chief Cyber Security and R&D to Deputy CEO and Acting CEO (September 2022), leading the company's strategy, growth and delivery and taking it to Cybersecurity Company of the Year in 2023 and again in 2024.

- Led NSSG to Cybersecurity Company of the Year at the OER Corporate Excellence Awards 2023, accepting the award from HE the Minister of State and Governor of Muscat.
- Cyber Security Company of the Year again in 2024, together with Excellence in Building National Talent in Cyber Security, at the Muscat Daily Cyber Security & Cloud Awards; earlier, the COMEX 2023 award for Excellence in Technology.
- Signed a memorandum of understanding with Group-IB at GISEC Global 2024 in Dubai, and, under my leadership, NSSG formed strategic partnerships with Resecurity and with Risk Associates for PCI DSS compliance services to Oman's banking, financial services and insurance sector.
- Named one of Arabian Business's Top 50 CEOs of 2023.
- PassRay, an in-house product of the R&D I led, was Highly Commended as Outstanding Cybersecurity Product of the Year at Intersec 2024.
- NSSG achieved CREST accreditation for penetration testing and ISO 27001 certification.
- Research and development products: PassRay (exposed and weak enterprise passwords), DCapsula (DMARC email authentication reporting), HashStrike (password auditing and recovery, with its own hardware rig) and the Linux Kodachi Kit.

Dreamlab Technologies AG, Switzerland

Chief Technology Officer Nov 2019 to Dec 2019

Chief Technology Officer of the Swiss cybersecurity company.

Eagle Eye Digital Solutions (EEDS), Muscat, Oman

Founder & Chief Executive Officer Jul 2008 to Dec 2017

Founded and led an IT solutions firm specializing in penetration testing, digital forensics, software development and security training. Defined the firm's strategy and product direction, managed operations and client engagements, and developed its security applications.

- Built a client base that included Omani public and private sector organizations.
- Created Linux Kodachi (2013), the privacy operating system that became Kodachi OS.
- Built StealthWalker, a Delphi Windows privacy application combining VPN connectivity, encrypted networking and DNS protection.
- Built SSL Eye, which compares TLS certificate fingerprints across nodes in several countries to detect interception; it won first place in the ITU Arab Regional Cybersecurity Center innovation competition.
- Delivered black-box and white-box penetration testing that measured clients' ability to detect and respond to internal and external attacks.
- Started digi77.com to publish security, forensics, server and development research.

ONS, Muscat, Oman

Senior Research & Development Manager Sep 1996 to Apr 2015

Led a 40-member technical team responsible for IT security projects, delivery, quality assurance and issue resolution. Formed research teams in internet security and digital forensics and oversaw penetration, vulnerability, FAT, SAT and acceptance testing.

- Established a national digital forensics laboratory and standardized its processes.
- Led development of a technology tool recognized by Nokia Siemens Networks (Munich) as the primary solution for a major milestone.
- Designed a security product recognized by Elaman.
- Served as digital security consultant and trainer, and built database applications that improved workflow and productivity.

RECOGNITION

Aug 2025	Kodachi ranked #1: Best Linux distro for privacy and security of 2025, TechRadar. Sixth year running at #1 (2020 to 2025).
2025	Best Linux distros of 2025: Kodachi picked as the best distro for privacy and security, TechRadar.
Jun 2025	Kodachi listed first of five Linux distributions for keeping your digital identity secret, Al Jazeera Net.
Mar 2025	Linux Kodachi listed first, 5 best Linux distros for staying anonymous, ZDNet.
Jun 2024	Cyber Security Company of the Year, and Excellence in Building National Talent in Cyber Security (NSSG), Muscat Daily Cyber Security & Cloud Awards. Two awards.
Jan 2024	PassRay highly commended, Outstanding Cybersecurity Product of the Year (NSSG), Intersec 2024.
2024	Kodachi ranked #1: Best Linux distro for privacy and security of 2024, TechRadar.
Dec 2023	Top 50 CEOs of 2023, Arabian Business. As Acting CEO of NSSG.
Nov 2023	Cybersecurity Company of the Year (NSSG), accepted on 8 November 2023, OER Corporate Excellence Awards 2023.

May 2023	Excellence in Technology (NSSG), COMEX 2023.
2023	Kodachi ranked #1: Best Linux distros for privacy and security in 2023, TechRadar.
Jan 2022	Linux Kodachi ranked #1 of the 9 best Linux distros for privacy-focused users, MakeUseOf.
2022	Kodachi ranked #1: Best Linux distros for privacy and security in 2022, TechRadar.
Aug 2021	Lab Hot Product: Linux Kodachi, APC Magazine (Australia), issue 496.
Aug 2021	Linux Kodachi listed first, Top 10 Most Secure Linux Distros for Personal Use, LinuxHint.
2021	Kodachi ranked #1: Best Linux distros for privacy and security in 2021, TechRadar.
Nov 2020	Kodachi ranked #1: Best Linux distro for privacy and security in 2020, TechRadar.
Sep 2020	Top privacy distribution: Linux Kodachi, Linux Format (UK), issue 267.
	First place, innovation competition: SSL Eye, ITU Arab Regional Cybersecurity Center (ITU-ARCC).
	#1 cybersecurity influencer in Oman, Favikon.

All press coverage of Kodachi: kodachi.cloud/docs/overview.html#recognition. Featured: Warith Al Maawali on Fueling Growth in Competitive Industries, The Industry Leaders.

HONOURS

- Commandments Medal
- Efficiency Medal
- Long Service and Good Conduct Medal
- Medal of the Royal Praise

SECURITY RESEARCH DISCLOSURES

- **Coinomi wallet, Feb 2019:** Investigated how the Coinomi desktop wallet handled recovery phrases during restore testing; the network captures and on-chain findings are published at avoid-coinomi.com. Details
- **Apple iOS Mail, Dec 2019:** Found the iOS Mail client leaking the local network IP, ISP IP, VPN public and local IPs and the iOS version to mail receivers and providers; Apple was informed. Details

EARLIER PROJECTS AND OPEN-SOURCE TOOLS

- **Anonymity Verifier** (2025): Browser-based tool on kodachi.cloud that shows the network and browser signals visible to websites: Tor status, proxy signals, WebRTC exposure.
- **Linux Kodachi Kit** (2021): NSSG's 2021 privacy kit around Linux Kodachi: a ThinkPad running Kodachi, hardware security keys, an encrypted USB drive, a USB data blocker, a Faraday bag, travel and VPN routers and an RF detector, in a Nanuk hard case with printed guides (historical product).

- **SSL Eye** (2017): TLS certificate fingerprint comparison across distributed nodes; first place, ITU-ARCC innovation competition.
- **Shy Girl** (2013): Linux reconnaissance script that brings together domain information-gathering tools for authorized penetration testing.
- **StealthWalker** (2013): Delphi Windows privacy application: VPN connectivity, encrypted networking and DNS protection.
- **Auto-IP-Changer** (2010): Automates scheduled changes among the IP addresses assigned to a Windows server.
- **E-Tornado** (2008): Remote administration system with a Delphi server and Visual Basic client.
- **FX-Storm** (2008): Forex analysis automation: pivot points, Camarilla levels, Fibonacci, charting and market news.
- **MSN Tool** (2008): Historical utility for recovering forgotten MSN Messenger passwords.
- **Mail Robot** (2007): Consolidates any number of .eml messages into Outlook PST files.
- **E-Bouncer** (2004): Proxy validation: classifies proxies by anonymity and protocol support.
- **Folder Monitor and Webfile Retriever** (2013): Visual Basic utilities built for client requirements: change alerts for files and folders, scheduled downloads.

EDUCATION

Master's Degree, E-Commerce, Griffith University, Brisbane, Australia — 2004 to 2005
Bachelor's Degree, Internet Computing, Griffith University, Brisbane, Australia — 2002 to 2004
Diploma, Computer & Information Systems, Sultan Qaboos University, Muscat, Oman — 2000

PROFESSIONAL DEVELOPMENT

Security: CEH, Certified Ethical Hacker (EC-Council); Penetration Testing Professional (eLearnSecurity); Penetration Testing Student (eLearnSecurity); The Exploit Laboratory, Advanced Edition; Run & Gun Penetration Testing; Advanced Internet Examinations Forensics; Computer Forensics: Introductory, Intermediate and Advanced; Wireless Security; HITB Hacking and Security; Hacking Skills & Security; Government Security Solutions Training; Trovicor Government Security Solutions; ISS World and Milipol Paris Security Updates

Management: Management Skills for an IT Environment (Learning Tree); Leadership Skills (People Achieve)

Foundation: C++, UNIX shell, Turbo Pascal, Visual FoxPro and Visual J++ programming; Introduction to Oracle and RDBMS; UNIX fundamentals; First Certificate in English (FCE)

AFFILIATIONS

- ISACA (Information Systems Audit and Control Association), Member (2012)
- Open Invention Network, Member (2016)
- Debian Derivatives Census, Member (Linux Kodachi) (2016)

TALKS

- 2023: Sultan Qaboos University, Open Source Foundation event (Presentation)
- 2019: Daleel Petroleum, IT knowledge for all (Linux Kodachi)
- 2017: Oman Banks Association, Banks Cyber Defence and Network Security (Panel moderator)
- 2017: Free & Open Source Software Conference, Sultan Qaboos University (Linux Kodachi)
- 2016: SQU ACM Google programming competition (Security Today)
- 2015: Muscat Securities Market (Security Awareness)
- 2014: Middle East College, Muscat (Digital Security)

TECHNICAL PROFICIENCIES

Languages	Rust, Bash, PHP, Python, TypeScript, SQL, C, C++, Java, Delphi, Visual Basic, Pascal, Perl, MQL, FoxPro, Gambas, HTML and XML
Applications	Tauri and Svelte (the Kodachi dashboard), Visual Studio, Microsoft and Adobe applications, graphics tools, WordPress, WoltLab Burning Board, virtualization, sandboxes, reverse-engineering tools
Platforms	Debian, Red Hat and other Linux distributions, Windows and Windows Server, IIS, Apache, Nginx, LiteSpeed, BIND DNS, cloud VPS fleets
Privacy & network	OpenVPN, WireGuard, Tor, DNSCrypt, PPTP, Squid, Polipo, web proxies, proxy chains, VNC repeaters, port forwarding, firewall and kill-switch design, SSH and Linux server hardening
Cryptography	OpenSSH, Stunnel, GnuPG and release signing, PGP, S/MIME, VeraCrypt, custom cryptocurrency mining rigs and pools
Intrusion detection	Snort, ModSecurity, CSF firewall, IBM Proventia, TippingPoint, Cisco Security Agent, endpoint solutions
Security testing	Kali, Metasploit, Nessus, Nmap, Nikto, Acunetix, Ettercap, Cain & Abel, Retina, WebScarab, Netifera, WarVOX
Forensics	EnCase (Guidance Software), AccessData, Sleuth Kit, Scalpel, PyFlag, SPADA, ForensicSIM, Cellebrite, Oxygen Forensic, MOBILedit, Logicube CellDEK, EaseUS, MD5 cloning devices
Data	MySQL, MariaDB, MS SQL, Oracle

PUBLICATIONS (49 ARTICLES ON DIGI77.COM)

2026

- My Valentine's Gift Was a Subnet DDoS (Feb 2026)

2025

- From Bash to Blazing Fast: Why Rust is Kodachi's New Powerhouse (May 2025)

- Automate Cybersecurity News Monitoring with This Bash-Based RSS Feed Tester (Mar 2025)
- Lsyncd Demystified: Automate, Secure, and Scale Your File Transfers (Feb 2025)

2024

- The Missing Puzzle of Life: Unlocking the Power of Progress for Personal Fulfillment (Dec 2024)
- Automate DNS Management with a Bash Script: Complete Guide for Developers (Dec 2024)
- Streamline Python Development with an All-in-One Bash Script (Nov 2024)
- Effortlessly Secure Your Website with Let's Encrypt SSL Automation (Nov 2024)
- Effortlessly Set Up ntopng: Monitor Your Network in Minutes (Nov 2024)
- Quickly Set Up Netdata Monitoring with a Simple Bash Script (Nov 2024)
- Effortless File Syncing: Automate Syncthing Installation with This Script (Nov 2024)
- Effortlessly Deploy a Dante SOCKS5 Proxy with This Bash Script (Nov 2024)
- Automate Systemd Setup with This Simple Bash Script (Nov 2024)
- Simplify Linux ID Generation for Fast, Unique IDs (Oct 2024)
- Converting EML Files to HTML, Markdown, and PDF (Aug 2024)
- From Hacked Victim to Cybersecurity Visionary: My Cybersecurity Transformation (Jul 2024)
- Negative Shareholders' Equity Explained: Causes, Implications, and Solutions (Jul 2024)
- Navigating Business Growth: Leadership Lessons and M&A Insights (Jul 2024)
- The Mirage of Privacy: Unveiling iPhone and WhatsApp's Advertising Conundrum (Jul 2024)
- AI and Drones in Combat: The New Frontlines of Modern Warfare (Jul 2024)
- Mastering the Process: Why Skipping Steps Can Lead to Disaster (Jul 2024)
- Kodachi: Six Consecutive Years of TechRadar Recognition (Jul 2024, updated Nov 2026)
- Big Brother in Your Living Room: Smart Device Surveillance (Jul 2024)
- Unlocking the Potential of Generative AI: A Comprehensive Guide for Business Leaders (Jul 2024)

2019

- Apple iOS Mail Client leaking highly sensitive information (Dec 2019)
- Validating VPN nodes (Nov 2019)
- Migrating from PHP 5.6 to 7.3 (Nov 2019)

2016

- Migrating from vBulletin to WoltLab Burning Board (Mar 2016)

2015

- Getting Your Mass Marketing Email to the Inbox: Effective Email Techniques (Mar 2015)
- iOS Tips: Keyboard Shortcuts on iPhone & iPad (Feb 2015)

2014

- SSL Evaluation for Oman Local Banks (Dec 2014)
- Automate backups from Linux servers to Amazon cloud (Nov 2014)
- Beyond vBulletin Functionality (Jun 2014)
- Setting up a VNC repeater on Linux (May 2014)

- Validating a proxy via PHP (May 2014)
- How to process email attachments automatically on Linux (Apr 2014)
- Make use of DigitalOcean and Vultr VPS APIs with a PHP wrapper (Mar 2014)
- The art of port forwarding on Linux (Mar 2014)

2013

- Set up your machine as a coin miner and generate virtual currency (Sep 2013)
- Mitigating the BEAST, Heartbleed, DROWN and POODLE attacks on SSL/TLS: grade A+ (Aug 2013, updated Oct 2026)
- Sanitize data and prevent SQL injections in PHP (Jun 2013)
- How to protect your WordPress external links (Jun 2013)
- The little secret on Digital Forensics (Jun 2013)
- Linux world: the guide you need (May 2013)
- Extracting SSL Fingerprints (May 2013)
- Ways to deliver your messages securely and anonymously (May 2013)
- Cloud storage solutions: where to store and what to use (May 2013)
- Vbtube mass delete script and mass correction (May 2013)
- Things to avoid while using TrueCrypt (May 2013)

PERSONAL

- **Nationality:** Omani
- **Languages:** Arabic (native), English (full professional)
- **Interests:** Martial arts, fitness

References: Available on request.