ARC VALTBERG

Technical Architect & Cybersecurity Specialist | Consultant

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SUMMARY

Hello,

I am the essence of a small IT department condensed into single individual. Whether it's **Development**, **Operations**, **Cloud**, **Administration** or deriving **Business Insights**, I've done it all.

Over the years, I have led and contributed to a multitude of software development projects, both on-premises and in the cloud. My primary programming language is **C#/.NET**, known for its flexibility and robustness. I have designed and engineered **RESTful APIs** and cloud-native solutions, implemented **DevOps**/**DevSecOps** practices (**CI/CD, Docker**), and enhanced the security posture of numerous projects.

Additionally, I have experience in conducting **security audits**, **analyzing audit data**, and **reporting**. I have performed **Web App security audits** and improved web, network, and cloud security solutions.

If your team is looking for a versatile **Tech Expert** with deep understanding of Cybersecurity, I'm always excited about the possibility of contributing to interesting projects.

EXPERIENCE

Technical Architect (Consultant)

Knowit

📅 08/2024 - Present 📍 Tampere, Finland

Azure expert for cross-functional development teams, owning all aspects of cloud infrastructure across networking, **DevOps**, resource provisioning, and cost optimization for **MSP**.

- Designed, deployed, and managed cloud environments using **Azure DevOps** pipelines, **Terraform**, **ARM templates**, and **Bicep** scripts to ensure consistency, scalability, and security.
- Handled advanced incident response and root cause analysis for critical customer issues—engaged when all prior support tiers were unsuccessful in resolving escalated problems.
- Managed **logging**, **firewall** configuration, **SIEM** integration, **threat detection**, **vulnerability management**, and **hardening** of cloud environments to align with security best practices.
- Continuously **optimized infrastructure** for performance and **cost-efficiency**, enabling seamless operations and predictable scaling for enterprise clients.

Security Manager (Consultant)

Knowit

📅 11/2024 - Present 📍 Tampere, Finland

Led cloud-based security operations for a major financial client, focusing on vulnerability management, threat detection, threat modeling and risk analysis, and incident response within the Azure ecosystem.

- Served as the primary liaison between stakeholders, development teams, and the **Security Operations Center (SOC)**, ensuring clear communication and coordinated action during security events.
- Monitored suspicious activity using **Microsoft Sentinel** and **Defender for Cloud**, collaborated closely with SOC analysts to investigate and mitigate emerging threats.
- Performed updates on complex, sensitive systems using **Azure Update Manager**, ensuring compliance with patch management policies in regulated environments.
- Created detailed security reports, communicated risk insights to business leaders, and coordinated the response strategy for identified vulnerabilities and incidents.
- Planned and guided security-related tasks for **SOC and Development teams**, from **threat mitigation efforts** to process improvements and strategic updates.
- Played a critical role in maintaining a secure, compliant cloud environment through proactive monitoring, stakeholder engagement, and hands-on use of Microsoft security tools.

TOP SKILLS

💎 **Technical Architect**
Microsoft certified Solutions Architect and have been working in Azure cloud for over 4 years. I have designed and implemented azure solutions from PoC to prod.

💎 **Senior Software Engineer**
7 years C# experience, 3 years python experience. Coded and scripted on pretty much anything from PHP and java script to C/C++ Go/ZIG, since 2011

💎 **Cybersecurity Specialist**
Web Application Security, Penetration Testing, Active Directory, Azure Cloud Specialist. CPTS/PNPT/CBBH Certified, THM Top 1%, HTB rank: Hacker.

CERTIFICATION

Microsoft Certified: Azure Solutions Architect Expert (AZ-305)
Microsoft

Microsoft Certified: DevOps Engineer Expert (AZ-400)
Microsoft

Microsoft Certified: Azure Developer Associate (AZ-204)
Microsoft

Microsoft Certified: Azure Administrator Associate (AZ-104)
Microsoft

Microsoft Certified: Identity and Access Administrator Associate (SC-300)
Microsoft

HTB Certified: Bug Bounty Hunter (CBBH)
Hack The Box

Practical Network Penetration Tester (PNPT)
TCM Security

HTB Certified: Penetration Testing Specialist (CPTS)
Hack The Box

CODING/SCRIPTING LANGUAGES

</> **C#/.NET**

</> **PYTHON + GO**

</> **POWERSHELL & BASH**

</> **REACT + JAVASCRIPT**

EXPERIENCE

Azure Specialist (Consultant)

Knowit

📅 11/2024 - 04/2025   📍 Tampere, Finland

Supported development teams in deploying and managing Azure-based infrastructure for a **C# microservices application** using **Azure Managed SQL, Role Based Security** and **OAuth 2.0** authentication.

- Delivered **DevOps** solutions and worked with deployment pipelines, ensuring smooth **CI/CD** processes and efficient resource provisioning.
- Provided hands-on guidance and mentorship to developers on Azure best practices, **cloud-native design**, and secure application development.
- Facilitated **architecture** decisions and infrastructure optimizations aligned with **scalability**, **performance**, and **cost-efficiency goals**.
- Acted as a bridge between development and operations, ensuring alignment between cloud infrastructure and software delivery lifecycle.
- Contributed to a **stable and maintainable** cloud environment by promoting **automation**, standardization, and secure-by-design principles.

Lead Software Developer (Consultant)

Knowit

📅 12/2023 - 08/2024   📍 Tampere, Finland

Sole developer for a mission-critical Warehouse API (**C#/.NET**) designed for real-time package tracking, built entirely on Azure cloud services including **Azure Functions**, **Queues**, **CosmosDB**, **Data Factory**, and **Fabric**.

- Engineered the system in **.NET 8** to handle over **250 000** requests per week under strict SLAs, where system reliability directly impacted operational efficiency and customer satisfaction.
- Improved data handling performance by over **4×** and scaled request capacity by more than **20×**, ensuring stability and future-proofing for peak demand.
- Built robust fail-safes and optimized the request pipeline to significantly reduce error rates, minimizing costly manual interventions and boosting application profitability.
- Took full ownership of **development**, **infrastructure**, **DevOps**, and feature delivery from **PoC** (Proof of concept) through to successful release and maintenance.
- Delivered end-to-end solutions that balanced performance, scalability, and resilience, directly enhancing supply chain transparency and operational agility.
- Also responsible for **API security** audits and improvements.

Senior Software Developer (Consultant)

Knowit

📅 05/2022 - 12/2023   📍 Tampere, Finland

Recruited for deep expertise in cybersecurity, particularly in web application and API security, to support the development of a high-impact Identity and Access Management (**IAM**) solution.

- Part of team developing **IAM API** using **C#/.NET** enabling secure access to specialized equipment, used by over 58,000 paid customers, delivering over **€15M** in client value.
- Addressed critical security vulnerabilities, ensuring robust encryption protocols and secure access control mechanisms in compliance with international standards.
- Maintained and optimized **Azure Cloud** infrastructure, developed secure **DevOps** pipelines, and ensured operational reliability and scalability.
- Supported a **50%+ revenue increase** and **onboarding of 30 000+ new customers** during project involvement; contributed to **strategic expansion** into the **Chinese market** with projected growth of **100 000+ users**.
- Played a key role in the API's evolution from MVP to **enterprise-grade platform**, integrating performance, security, and compliance improvements at every stage.
- Collaborated with Front-End developers to implement secure **React**-based UI components and **harden client-side application logic**.

LANGUAGES

Finnish
Native

English
Native

Japanese
Beginner

NON-TECHNICAL ACHIEVEMENTS

💎 **Leadership**
5 years CEO experience. Lead agile teams working on product development and infrastructure development.

💎 **Business Management & Development**
Increased revenue by over 20% in 3 years, found new business opportunities.

💎 **Operations Management**
Lead International Logistics and Trade organization for over 5 years

💎 **Crisis Management**
As CEO of a company handle multitude of stressful situations over the years.

💎 **Staff Training & Supervision**
Trained personnel in Coding and Cybersecurity domains. Personally trained over 30 team members to pass Cybersecurity Certifications.

SKILLS

Software Development & Architecture

Software Development	C# / .NET

Software Architecture	Security Mindset

Full-Stack Development	Visual Studio

Web Application Development

Front-End Development (Blazor/React)

Back-End Web Development (C#)

Unit Testing	Integration Testing

SOLID	LINQ	Scrum	React

Object Oriented Programming (OOP)

Functional Programming	Agile

Information Technology	Git

JavaScript	PowerShell	Bash

EXPERIENCE

CEO | Entrepreneur

Free Forest Trading Oy

📅 01/2017 - 05/2022   📍 Varkaus, Finland

As one of key Founders in the company and most knowledgeable in company operations assumed CEO position in 2017 when previous CEO retired.

- **Lead team** of 15 subcontractors, coordinating timely delivery of goods across International border
- Company achieved trade volume at **1 million** euro (2022)
- Increased self-sufficiency by **68%**
- Successfully navigated complex **international market** conditions, including the impact of global sanctions on key business sectors.
- Executed a structured and responsible business closure, prioritizing **legal compliance**, **stakeholder communication**, and financial accountability.
- Demonstrated resilience and strategic foresight in transitioning operations, preserving **brand integrity** and **professional relationships**.

Lead Software Developer | Entrepreneur

Free Forest Trading Oy

📅 04/2012   📍 Varkaus, Finland

As one of the Founders and sole Developer at a logistics company, I created and maintained software for tracking logistics operations, billing, and inventory management. (**C#/.NET + SQL + Microsoft Server**)

- As **Solo Engineer** run on premises servers and development for over 4 years
- Transitioned software to stay compliant with customers requirements
- **Architected and Developed** Logistics software for international transportation and deliveries
- Software was used to track over **40 000** m3 of different wood types across international border over multiple warehouses
- Was responsible for whole infrastructure security from web/API to on-site, administered whole network and provided support in critical situations.

Entrepreneur

Frozen Haze Oy

📅 07/2010 - 02/2017   📍 Varkaus, Finland

Founded a real estate venture, specializing in property investment and development.

- Lead small teams specializing in landscape renovation and design.
- Managed company finances
- Planned new projects
- Build successful company from scratch
- Profit at 140 000 € /year

System Administrator

Amilenic Oy

📅 03/2008 - 07/2010   📍 Varkaus, Finland

For my excellent performance on the project I was recruited by the same company to continue upkeep and development for created software as well as upkeep and maintain infrastructure.

- Maintained infrastructure with 0 hours downtime.
- Performed necessary updates during nighttime shifts

Software Developer

Amilenic Oy

📅 03/2006 - 03/2008   📍 Varkaus, Finland

Initiated and led the development of a logistics software solution, handling everything from server setup and database design to coding.

- Developed software used for logistical operations and wood harvesting
- Was responsible for all infrastructure in use, as well as upkeep and administration of said environments

EDUCATION

Engineer's degree, Information Technology

Savonia University of Applied Sciences

📅 09/2006 - 08/2011

SKILLS

Soft Skills

Leadership   Teamwork & Collaboration

Reporting & Documentation   Consulting

Time Management   Problem-solving

Cloud & DevOps

Azure Cloud   CI/CD (Azure DevOps)

DevOps   GitHub   Automation

Infrastructure as a Code (IaC)

Networking   Network Administration

System Administration

Cybersecurity (Red)

Cybersecurity   OSINT

Application Security Assessments

OWASP Top 10   Vulnerability

Vulnerability Scanning   SQL Injection

Penetration Testing   Ethical Hacking

Red Teaming   Reverse Engineering

Exploit Development   Social Engineering

Web Application Security

Cybersecurity (Blue)

CVSS   MITRE ATT&CK   Wireshark

Hacker mindset   Information Security

Network Security   Application Security

Vulnerability Assessment   SIEM

Security Information and Event Management

Microsoft Defender for Cloud

Microsoft Sentinel

TOOLS AND TECHNOLOGIES

Microsoft Azure

4 Years working experience. Been part of and lead creation of new solutions and modification to existing solutions to improve profitability and create business impact.

EDUCATION

Vocational Qualification in Business Information Technology, Information Technology

Savo Vocational College

📅 08/2003 - 05/2006

PROJECTS

Mentorship & Training

📅 07/2018 - Present   📍 Worldwide

Provided hands-on **training** for both internal teams and client personnel, focusing on **practical skills** in penetration testing, web application security, and defensive operations.

- Mentored over **30 individuals** in cybersecurity, with all mentees successfully certified.
- **Created training material** and environments for personnel training.

Hack The Box

📅 10/2020 - 07/2024   📍 Finland

I deepened my expertise in cybersecurity by studying topics that enhanced my Capture The Flag CTF skill set. This included participating in simulated enterprise network penetration tests through Hack The Box's Pro Labs, where I executed tasks such as:

- Web Application Penetration Testing
- Vulnerability Discovery / Asset Discovery
- Crafting Custom Exploits (AV Bypass)
- Active Directory Penetration Testing
- Report writing (Sysreptor)
- As a result of these studies, I **earned CPTS and CBBH certifications**

THM/HTB, Capture The Flag, TOP 1%

📅 09/2019 - 07/2024   📍 Finland

Participated in numerous Capture the Flag competitions on Hack the Box and Try Hack Me. The THM/HTB learning platform offers users the opportunity to learn cybersecurity and IT topics. I have dedicated a considerable amount of time to this platform and have achieved the following results:

- In 2023 got **Top 1%** on TryHackMe, and sub 10k in ranking
- Reached the **top rank** of Level 13 [0xD][LEGEND]
- In 2024 overall count on just CTF's reached over 100 Boxes done
- In 2024 finished **200th** room on THM platform
- **Earned 9 certificates** for completing the following learning paths: Penetration Testing, Security Engineer, CompTIA Pentest+, Red Teaming, Offensive Pentesting, and more

TRAINING

Microsoft Cloud Attack and Defense Bootcamp (finished)

Course prepares members for Microsoft Cloud Red Team Professional (MCRTP) certification.

MS Learn: Cybersecurity Architect (80%)

Microsoft Learn path to prepare for Azure **Cybersecurity Architect** Certification

CompTIA Pentest+ (done)

Practical skills required for the exam: using tools, exploiting networks/web apps, attacking AD, and managing vulnerabilities effectively.

THM: DevSecOps (60%)

Learning Path focuses on securing pipelines and introducing **Infrastructure as Code (IaC)** and Containerization security techniques.

Security Engineer (done)

Security engineering fundamentals, including systems design, **threat analysis**, **risk management**, and **incident response** for cybersecurity careers.

Offensive Pentesting (done)

Real-world pentesting skills using industry tools and methods to identify vulnerabilities and prepare for certification and jobs.

TOOLS AND TECHNOLOGIES

Zero Trust Architecture

Leveraged **Azure AD**, **Conditional Access**, **MFA**, **Sentinel**, and **Defender for Cloud** to secure both infrastructure and application layers.

Well Architected Framework

Implemented **infrastructure automation**, **monitoring**, and **governance policies** to ensure scalable, maintainable, and resilient deployments in regulated environments.

Linux/Windows

Microsoft certified **Administrator**, have also worked for 2 years as Systems Administrator at the start of my career. Been running Linux (**Arch/Kali**) as my main OS for ages.

Burp Suite, Caido, ZAP Proxy

I personally prefer **Caido** for daily use, however Im intimately familiar with Burp for Web Application Security testing

Metasploit Framework

Used this framework for **privilege escalation** and **vulnerability exploitation**. This tool is essential for any cybersecurity expert.

Active Directory

Im familiar with the most **AD** concepts and have worked with **AD** environments. Im also knowledgeable in **Kerberos authentication**, **TGT/TGS** flow, and **AD Security**.

FFUF, GoBuster, Hydra

Industry standard fuzzers for use in fuzzing and enumeration.

NMap, Rustscan

Port scanners. Rustscan is my go-to favorite for CTFs

John the Ripper, Hydra

I have performed **password security analysis** in corporate networks for clients as well as have used these tools for years in CTF competitions.