

# GUY BARNHART-MAGEN

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More than 15 years of experience in the security industry (both corporate and start-ups), focused on **building research and development teams**, in areas such as AI Security, Reverse Engineering and new technologies. Track record of taking research and making it applicable to business needs.

**BSidesTLV co-founder and CTF lead (largest non-commercial technical security conference in Israel, NPO)**



Public Speaker (see my [talks](#))

**Cisco Security Ninja Black Belt** - the highest security award in Cisco, given to a small group of ~50 people out of Cisco's 140,000 employees.

Three military (General, Brigadier) awards for operational excellence and innovation

more information can be found on my site at: [www.productsecurity.info](http://www.productsecurity.info)

Employment History

**Intel, Security Research Manager**

2017-Current



*Security research team of ~10 individual (50% new hires)*

I was asked to join Intel's **Cyber Center of Excellence**, to build a software reverse engineering group. As I grew the team, our focus expanded into triaging various technologies for security impact, among them: Automotive, 5G, IoT, Blockchain and Trusted Execution Environments. During my tenure, I developed **Intel's corporate strategy for AI Security** and defined the road map, including start-up scouting.

My team covered Security for AI, building **both attacks and defenses**, focusing on threats in the 18-24 month horizon, and developed attacks, analyzed them, and found solutions (PoC). Our daily activities included conducting experiments into various techniques to protect AI and TEE, finding vulnerabilities and exploiting them and presenting our recommendations to our internal partners.

The team (~10 people) consists of professionals with diverse skills: reverse engineers, data scientists, architects and software developers.

[Our research drove and influenced Intel products \(both HW and SW\) and provided focus for the business teams in the AI domain.](#)

**Nation-E, CTO**

2015-2016



*Software developers, hardware eng. and security researchers, ~17 individuals (40% new hires)*

Nation-E is an industrial IoT start-up, focused on solving serial communications problems in the OT domain. The product was complex involving a Serial (RS232/485) and WiFi unit built from scratch, an adapted industrial gateway and a micro-service based back-end (high throughput, load-balancers, Kafka). As the CTO and site manager, I had **full responsibility for managing the Israeli site** (~17 people): execution, roadmap and day to day operations.

My daily activities included guiding the developers, engaging with manufacturers and going through various certifications processes. In addition, I also **implemented best practices** (e.g. CI/CD and git) and experiments to select the best SW stack for the product.

[I successfully brought Nation-E from a confused position with an array of PoC to a unified product and architecture allowing development of the business strategy.](#)

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**Cisco (Through NDS acquisition), R&D Group Leader**

2010-2015



*Security researchers and software developers, ~25 individuals (50% new hires)*

Cisco Video Technologies Israel (CVTI) are tasked with protecting Pay-TV systems, and have robust smart card based technology at the edge with data center appliances in the back-end.

I managed three separate groups: **Counter-Hacking, Supply Chain Security and Cryptographic Libraries.**

The counter-hacking group (~6 people) was actively engaging various hacking groups to protect our clients. The supply chain security group (~12 people) was involved in protecting our chips from manufacturing to final integration and activation in our products. The cryptographic libraries team (~7 people) was responsible for writing cross-product libraries, with the strictest quality – for our complete technical stack, from embedded devices to back-end appliances. **Our libraries were FIPS-140-2 certified** in a single iteration.

I've also developed solutions and architectures based on our technologies in other domains: High availability, scalable HSM systems, automotive industry and IoT integration.

[Our work directly contributed to the company bottom line by engaging hackers on customers systems and defeating them, wide use of our crypto libraries \(in over 100M embedded devices sold\) and successful operation of the supply chain security \(zero incidents during my tenure\).](#)

For my efforts in building and executing security initiatives across Cisco I've received the **Security Ninja Black Belt** – the highest award in Cisco, given to a small group of ~50 people out of Cisco's 140,000 employees.

*Student position at the IP Backbone and Video On Demand team of one of the largest ISPs in Israel (2005-2010)*

*Developer in two start-ups during 1997-1998 before and during the beginning of my military service (Delphi, C/C++)*

Academic Background

2006-2010 **B.Sc. In Electrical Engineering**  
(HIT - Holon Institute of Technology) **Cum Laude**

- **Best Project award** - bio-metric security (facial recognition)
- [Paper: Active contours: Generalization of the snake mode](#)

2007-2010 **B.Sc. In Applied Mathematics** (HIT Holon Institute of Technology)

- Leading project in neural network based disease detection
- [Paper: Differential Diagnostics of Thalassemia Minor by Artificial Neural Networks Model](#)

Military Service

**Operations Officer and Chief Technician – IDF Communication Core**

1998-2005

8 years in a regional communications battalion, **leading projects from conception to full execution**, including practical implementation from component to the entire system. Designed a system to simplify and improve mapping of high data connection, **still in use today** Award by the general in charge of the southern region (ALUF DAROM) for operation excellence  
Two awards given by the southern communication brigade commander for innovation and operation excellence