

**Dr. Bernard Robert Bowitz (Dipl.  
Ing., CISSP, AISP, MCP,  
ISO27001)**



## Curriculum Vitae

### Current Location

current : 65185 Wiesbaden, Germany ( German National)

remote: PR ( Permanent Resident ) 757488 Singapore

### Contact

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Email: [bernardbowitz@gmail.com](mailto:bernardbowitz@gmail.com), [robertbowitz@gmail.com](mailto:robertbowitz@gmail.com) ,  
[info@securencrypt.com](mailto:info@securencrypt.com)

Website: <http://securencrypt.com>; <http://defensor.io>

For Singapore: Phone +65-90090296

### Website

<http://defensor.io> Defensor Blockchain Network Security

<http://securencrypt.com> Network Security / Encryption

### Structured CV

#### Specialist focus

**For over 15 Years Expert in Cyber Security, as developer, implementer and foremost sales globally.  
Built a global network of customers for selling security products in Enterprises, Banks, Governments, mainly in Europe  
and Asia. My strength is the combination of technical knowledge and sales.**

ISMS / ISO27001 / BSI100, Training, CISSP, AISP, ISO certified, IT Consulting, IT / CyberSecurity, Network (Mobile, Ethernet, Wireless), Cloud Security and Administration, Project Management, SOC, EndpointSecurity

Have successfully passed several ISMS / ISO 27001 / BSI 100 certifications since 2014. Are CISSP, CISA, MCP, AISP, BSI and others certified. Spoken English as 2<sup>nd</sup> mother tongue, as well as Chinese Basic, Spanish language.

Expert in RZ migrations, hardware and software, development of security based on BSI Grundschtutz. Past projects References: DB Netz, BAMF, BA, Atos, CGI, OCBC, DBS, Credit Suisse First Boston, BSI, BDR, Cisco, etc.

Conduct training on the latest state of the basic protection.

Lead sales teams of up to 20 members in a multinational environment. Built strong customer vendor relationships, brought several Asian Suppliers of Hard and Software from Startups to multi million \$ companies.

I am a senior network security expert (CISSP) with a broad understanding of the technology and the associated applications. My experience covers both areas, mobile networks and traditional networks.

"State of the art kind" Security Architectures, BSI IT-Grundschtutz, ISO 27001, ISO 80001, IT Sig, Relevant Security in Federal Agencies - SG - Bamf- EHR-BDR and others, Enterprise Security, EndpointSecurity

I work administrative and technical operative and in sales. Analyze security architectures and processes, using several tools.

Managed Security Services, ArkAngel Platform, Penetration testing, Vulnerability Assessments etc.....

Cloud security and management, experience with AWS and Azure, customized clouds, VPN .....

My focus is on all aspects of IT and telecommunications (telecommunication) security from basic technology to the application layer.

That means, from hardware to software development and consulting and consulting services

Especially in recent years, I worked in Big Data's infrastructure and mobile security environment with the aim of using Analytics technologies for new analytical concepts and actively seeking security anomalies to prevent and reduce attacks.

A special strength lies in the mobile area, Android, development of secure applications in the payment traffic and e-commerce.

### Certifications

CISSP, AISP, CISA, CISM, MCP, ISO27001, ITIL, BSI GRUNDSCHUTZ, PhD

## I use my strengths and experience for ...

- Help and support for customers to find the right business and technology solutions by working as a consultant and consultant for design trend-setting security architectures
- Threat Management, Information, Platform, Perimeter Protection, Identity & Access Management as well as in the Implementation of security solutions for customers
- **Lead projects to the desired success by working as a project manager**
- Support the company's research departments to find new market solutions to achieve revenue growth and profit
- Development of new products and services (software and hardware), IT and telecommunications
- **Support sales and marketing to position products and services in future markets**
- Training and development of high-performance service teams in order to handle even the most demanding tasks of the industry

## Industry Experiences

- Banking - Secure banking via the Internet - Smartcard access
  - Automotive GPS internal electronics
  - Transport and traffic, GSM-R
  - Test and certification, BSC, MSC, BSS, NSS
  - (E) Government - eBanking - eCompanies
  - Source code analysis, adaptations, extensions, corrections
  - Risk management, risk / residual risk analysis
  - HPe ArcSight, McAfee ePO, Kaspersky, MicroSoft Security, Sophos, EndpointSecurity
  - IT / TK technology - for large industry and consumers
  - Large networks, industry and the public sector
  - Wireless and mobile (Android, Windows) networks
  - Creation of documentation, support solutions
  - Prototype design, manufacturing management
  - Project Management, Big Data, Scrum, Kanban, MS
  - Creation of test environments and necessary tools
- 2015, developed the first portable Passport scanner on Android core, with integrated multi-fingerprint scanning for border patrols, registration of asylum seekers, police, BKA, security forces, banks ... ..
- Exchange Networks, Windows ....
  - Semiconductors, chip sets - design and embedded software Mobile hard and software - especially latest cybersecurity with special chip based algorithm, AES 256, Diffie - Hellmann PKI
  - Card emulation
  - Identification with biometrics (fingerprint, patented high security solution Nurugo) - Security based on new SIM card technology ...

## Technology Knowledge (not limited to)

- Java, Json
- Cloud Security - Enterprise - Government - Public Services – Military
- PKI, SSL , MS NDES, SafeNet Networks HSM
- SaaS, AWS, Azure, MS-Cloud, Strato, IaaS, XaaS
- Internet traffic - access identification
- Secure transactions - UAF access without passwords - Special military classified security
- NFC Smartcard
- Research and development, software developers, hardware developers
- IP - VoIP networks, voice, messages, data, video
- Consumer electronics
- New technologies based on SIM and SD cards, identification without passwords
- Analysis of network security, risk management, risk analysis, hunting for cyber criminals and hackers
- Personal security - biometrics - CCTV systems with biometrics detection methods
- Novel high security solutions for HR and other applications with mobile devices
- **Secure Access Technologies, IAM, SAM, SaaS, AMR4V, Blockchain AccessSecurity (BAS)**
- Risk & Compliance Management

## Rolls and Talents

Enterprise Project Manager / PMO ( Ms-Project)  
Sales Manager – Team Leader  
DVSGO Consultant and PM under EU Guidelines  
PM in financial Infrastructures

Team PM of 80+ Teams / SOC / NOC / ISMS / CISO  
Technical PM  
Consulting / Auditor / SCM / Governance /  
Conference Leader  
Project management / organization / coordination  
Engineering / IT-related engineering service

## Comments

As an expert in IT security in fixed and mobile networks, I have carried out projects under BSI 100, ISO 27001, certification of public networks under ISMS etc. in recent years. More than 15 years experience in IT security, project management, audit, analysis, sales, etc.

I have in-depth knowledge of the BMWI's SecretSecurity Book (GB), and build many of my projects on the specifications of the GB.

## Projects-Professional Career

**2017 - Gruendungsmitglied und Board Member DEFENSOR (<http://defensor.io>) Die erste SaaS Blockchain Netzwerk Sicherheit NaaS**

**11/2017 – current (remote Project)**

**Project Manager ( Energie Industry)**

**Cloud Architecture, Paas, IaaS, SaaS,**

**Implementing of a Blockchain Network Security Structure**

- **Introduction of a (BC) Blockchain Information Service Management System**
- **Development of a BC Network Security Application**
- **Development of the first Financial / Investment Banking Application Management Service**

**05/2016 – current ( 15.April 2018)**

**Project Manager ( Financial / Banking environment)- (Cyber) Security Compliance in Big Data Network**

**Mainframe, Windows, Oracle, Solaris....., Customer – Vendor Relations, confirmation of IBM Security products**

**Security Compliance Management, IAM, SAM , AMR4V Process / Migration**

Project Manager for a global network in the financial industry and Government (25,000+ Server and Data bases)

Developing and employing a Windows 10 patch and update process using ICS

Updating multiple components in a VM environment, updating the patch process on IBM mainframe ( under Unix and Linux)

Heading an international Team of about 56, in 9 countries, working at site and remote

Analyze new security products and release to purchase department

- Coordinate the development of information security policies and procedures and disseminate to the user community
- Endpoint Security (IBM BigFix, Tanium, Checkpoint, GFI, HPE, Sophos, Kaspersky...)
- Release new Vendor Products as secure to sales department
- Ensure that the information asset inventory is continuously updated
- Ensure that business impact analyses are regularly performed and reviewed
- Work with system and application owners to assess compliance with information security regulations and to plan, document and implement measures to mitigate risks
- Build and maintain a risk map identifying all risks to information assets
- Lead the audit team and perform final audits
- Employ a monitoring process to control the stability of the systems
- Perform security assessments for newly developed or newly acquired companies, business processes, systems and applications
- Coordinate the development of an education and training program on information security
- Develop the security event management process and associated SIEM system
- Develop and improve the security incident management process
- Audit external service providers to ensure compliance with information security regulations
- Governance, Plan, Implement multi password access system with High availability ( newly developed process latest technology)

- Work with multiple vendors, develop customized security for mainframes.
- Reorganize admin rights ( AMR4V)
- Manage Budgets, responsible for establishing RfP, SOW, RfI, RfS, main responsibility to lead the Projects.
- Working with MS-Project and the POM, PMO.
- Establish a new SOC for global operations
- Run a team of about 19 security and network experts on all levels
- Creation of test specifications (scenarios and cases)
- Evaluation of test data and cases
- Integration and acceptance tests
- Test documentation
- Other responsibilities in current and former Projects
- Contact for users of the system, coordination with SW manufacturer
- Stand-alone marketing of the solutions and services defined for the Cyber Security portfolio,
- Independent elaboration of solution concepts and proposals after an in-depth analysis of the customer situation
- Pre-sales activities, creating offers, participating in RfI and RfP answers and contract negotiation
- Provide security consulting on all security topics with the focus on Cyber Threat Management, Information Protection, Platform Protection and Perimeter Protection
- Create effective customer presentations based on market intelligence and customer analysis
- Create advertising material and sales documents to meet customer needs
- Active participation in representative tasks, security events, customer events, workshops, sales training and presentations

#### **04/2015 ongoing Team Project**

Introduction of Multifactor-Authentication

Using of various Monitoring tools ( BS certified)

Internal and external owned frameworks, Malware, Antivirus monitoring, prevention...

#### **09/2016 - 04/2017**

##### **8 Months**

Senior Sales Enterprise Security Architect (ESA) at an international telecommunications company (IT security)

#### **Project Content**

Selling the customers Security Products, Documentation and implementation of safety requirements according to BSI 100 Grundschutz und ISO 27XXX – Sales Team Leader

- Creation of a governance in the enterprise environment-
- Preparation of an ISMS and consulting on the certification
- Updating the Mainframe / WIN 10 patching process
- Preparation for ISMS / ISO 27001 certification-
- Design and develop a SOC and SIEM Structure based on available elements
- ESA- end-to-end security strategies, network segregation, Data Center, Communication etc.
- Consultancy and presentation - Risk analysis
- Encryption proposals for the entire project, cloud, data center, mobile, laptop, desktop
- Threat analysis and creation of a security catalog
- Recommendations for a modern Enterprise RAS concept
- Documentation in the SCRUM environment
- Illustration and development of processes
- Modeling of different concepts
- Documentation of embedded software under Linux / Android
- Documentation of security processes and functions in the mobile and fixed network area
- Creation of manuals / manuals
- Documentation of existing software for system operation
- Creation of training concepts in the operating environment
- Creation of cryptographic solutions in the mobile environment
- Documentation / development of test and development environment configuration on various platforms, Windows, Android, IOS under Common Criteria Evaluation

#### **Remote Team 07/2016 - 08/2016**

## 2 Months

Development of training concepts and processes for IT security based on BSI Grundschrift and ISO 27001

### Project Content

- Introduction to the training of teams
- Design and operation of technologies for the detection of targeted attacks on company networks
- Demonstrating that a stable update and patching process is the best protection against attacks
- How to create an ICS process in enterprise networks
- Configuration of the NOC and SOC, introduction of a SIEM
- Develop innovative detection and defense measures
- Controls and processes for safety during operation
- Self-responsible analysis of attacks and recommendations for action
- Execution of penetration tests and safety analyzes including elaboration of attack scenarios and documentation of work results
- Preparation of guidelines for IT security
- Create safety emergency concepts
- Experience in the administration and protection of firewalls (eg, juniper, checkpoint, cisco), content security systems, SSL VPN gateways, IPS / IDS, Sina, Genoa, Doi ... etc.
- Knowledge of the most important standards of IT security (ISO 27000 ff, PCI, Common Criteria)
- IT infrastructures (networks, client server systems, virtualization, access control, etc.)
- Conception of a SOC based on it
- The latest knowledge in Windows 10 and Windows mobile
- Security of SAN and NAS, storage area network encryption (SANE)
- Final assessment of a complete safety concept with practical implementation

## Team Leader 02/2016 - 07/2016

### 6 Months

Project at one of the largest transport and logistics companies

### Project Content

- Introduction of an ISMS under the operating conditions in the GSM-R network and BSI Grundschrift under ITSig
- Preparatory work to expand the existing NOC into a SOC
- Creation of a network structure plan
- Planning and implementation of a SIEM / SOC (Security Operation Center), summarized for the various departments (Systel, TK, LST, etc.) \*\*
- Creation of governance
- Creating a new patching and update process, with a new WIN 10 installation (European wide Network)
- Creation of asset management
- Threat analysis according to ISO 27001 and BNA 109
- Risk management, risk analysis
- Harvest analysis with residual risk assessment
- Planning of safety certification
- BSI basic protection, ISF, Cobit, BNA, ITU 1501
- Analysis of the GSM-R network and interfaces to Systel, LST ...
- Understanding of new plans, IP networks and re-investment projects, LTE updates ... ..
- Practical implementation of all results and process into a SOC

\* Planning and layout of the planned real estate, planning of necessary hardware, preparation of frameworks for suppliers, people management, restructuring of the relevant process

\*\* Monitor / Analyze Network Traffic, IDS alarms, Network Intrusion detection, Incident declaration, threat management (setup of the SIEM), Monitor all relevant Network appliances and analyze logs for malicious activities. Development of all kinds of processes to optimize incidence response times. Automated reporting system to the BNA and the BSI under ITSig. Documents and report processes of all incidents. Incident automation processes, systems stability

## 09/2015 - 02/2016

### 6 Months

Germany Project in public services

### Project Content

- Complete system analysis
- Creation of an ISMS concept
- Repair and prepare the current (Windows / Unix) environment to migrate to a new DC
- Design the necessary Installation process for W10 Servers and clients, update, patching and copy of existing data, including MS-Exchange. Implementing tools to monitor the Systems Life cycle.
- BIG Data Project Manager, (Kanban, Scrum), MS, ...
- Calculation of data storage (SAN) in a new data center
- Analysis of existing weak points (security)
- Risk management and residual risk analysis
- Analyze suspicious behavior
- Analyze and recommend the high availability of the new network
- Hand over to Production
- Reparatur und Vorbereitung der derzeitigen ( Windows/Unix) Umgebung zur Migration in ein neues RZ
- Migration and definition of MS CA, POC
- SSL – SHA1 to SHA-2 migration
- ADS patching
- Update, installation, patching of HSM, Hardware Security Modules ( SINA, SafeNet), documentation of the Key lifecycle
- MS NDES, Installation, implementation of PKI components
- Decommissioning after updates and patches installation
- Entire Project and processes documentation and presentation to higher levels and management
- Transfer into production and local team training
- BIG Data Projekt Manager, (Kanban, Scrum), MS,...
- Planning the migration of the existing NOC / SOC into a new SOC according to ITSIG and BSI 100 / ISO 27001 specifications
- Implementation of a completely new bb (train operation) SOC
- IT and TK adaptation to the mobile (Android, IOS) network, development of special Android applications
- Recommendation from hardware suppliers
- Vendor Management, Budget Creation, Framework
- Migration with minimal operational overruns
- Target to reduce potential attacks from 50% -60%
- Integration of encrypted VoIP and fax traffic
- Analysis of redundancy and latency, operational improvement
- Compilation of complete documentation
- Training of the personnel
- Presentations for top management
- Transfer to internal administrators, training

**02/2009 - 09/2015**

**6 Years 8 Months**

SecureScript Neoi Pte. Ltd.

## Project Content

- Director (Mobile IT - cyber security - support, management, consultant) Professional consulting group, Securescript acquired by PIC technology in 2009
- Responsible director for company management under local regulations responsible for Asian Area sales of cyber security products from Asian Vendors, contract position
- People Management (120 Consultants), Vendor Management, Framework
- Consultant and Project Manager, IT HR \*\*
- Manager Team Cyber Security
- Development of modern encapsulations in the mil./region area
- 2014 for the Soccer World Cup, development of a television application which allows to combine online streams from different countries in an eLauncher eNtertain application. The development was made for Amazon (see Amazon "elauncher")
- Android developments in the enterprise environment, commerce and payment applications
- Risk management, risk analysis
- Special software skills: Eclipse IDE with ADT, Scrum, Java, Agile, Kanban, Android Platform Tools, C, C ++, Java Script,
- Android SDK, NDK, Titan Mobile SDK, Hyper, API, Adobe Air, HyperNext Android Creator (HAC), jQtouch, HTML5, CSS3, LingoJS
- Development of Android applications, IOS, Windows
- Cyber / IT Information System Architecture / Security
- Employee management and training
- IT security software design and development
- Management of the international developer group of 100+
- Implementation of a new network and Internet security platform with SINA and AVDA as well as development of Algorithms

- Transition / conversion from traditional enterprise telephone systems to IP / VoIP, IP video conferencing, VoIP / IP encryption
- Design and development of IT / CyberSecurity / IP / VoIP solutions in mobile systems, for all platforms (Windows, iOS, Android, Blackberry, etc.)
- Securing cloud with new PKI-based security and special encrypted disk drives
- Encryption of critical data with customer-specific UAF authentication and identification's factor, dedicated access to specific individuals and groups
- Update existing systems to the latest safety technology
- Training and public lectures on risk management and cyber security
- Manage and manage the marketing of the company
- Consulting, projects, analysis of customer requirements with suggestions for changes and solutions so that sales can support marketing and attract new customers

\*\* Planning of new Threat Monitor processes, NOC and SOC checks and updates. Implementation of IT security processes

**01/2005 - 01/2009**

**4 Years 1 Month**

CEO CTO (Combined Position), soft/hardware development of smart mobile devices

### **Job / Project**

PIC Intl. Ltd. Hong Kong (Pre-decessor of Securescrypt Singapore)  
Project / Job Content

- Head of 200 technical staff in Hong Kong, China, South America
- Employee training and guidance
- Management of local branch offices and contract partners
- Design new IT security and network solutions
- Design and implement sophisticated IP / VoIP systems for service providers and enterprises
- Frequent trips
- IT risk management, analysis, lectures, trainings
- Special training for investment bank IT personnel training on risk management

**08/2004 - 12/2004**

**5 Months**

Interims CTO - Electronic, development, manufacturing

### **Customer / Job**

Lintux Hong Kong Ltd.  
Project Content

- New customer acquisition
- Order coordination with Chinese factories
- Training of technical staff
- Expertise and transfer of experience
- Development of IP systems (The company was later acquired by Lintux Hong Kong)

**11/2003 - 07/2004**

**9 Months**

Interims SVP – The development of a new Smart Mobile Platform MXI

### **Job Content**

Goldtron Singapore  
Job/Project Content

- Head of the Singapore Developers Group - Chief Coordinator with Hong Kong Development Team - MXI Platform Design (combined mobile and VoIP services)
- Installation of the first VoIP network in Malaysia
- Special platform for portfolio management software

**12/2000 - 10/2003**



## **2 Years 11 Months**

Taitoma Group – Taiwan ( HTC Gruppe) - in Taipei-Taiwan Interims CTO

### **Project Content**

- Responsible for the development and construction of software and hardware as external services of Asian manufacturers
- Responsible for development and project management methods Implementation of processes, procedures, reporting, strategic management
- Development of solutions for IT security and risk minimization
- Quality control used for large-scale projects, within the Asia Pacific & Greater China regions, and / or industry vertical mapping strategies to ensure the construction and development service of the team and the company in the region for the Titoma Group

## **10/1999 - 11/2000**

### **1 Year 2 Months**

PIC Intl. Ltd. A Hong Kong group of consultants, contract engineers / project managers

### **Project Content**

- Responsible for the development and construction of software and hardware as external services of Asian manufacturers
- Stays for long periods of time for project implementation in Iraq, Lebanon, Syria, Saudi Arabia and some other countries (installing radio communications networks)
- Complete systems installation and implementation
- Developed the first encrypted satellite phone for a German group, which was then used by public services and ships. (Besides, Fernstudium Princeton University USA, graduation Phd. Dr.)

## **02/1998 - 09/1999**

### **1 Year 8 Months**

CREDIT SUISSE FIRST BOSTON HKG, (UK based)

### **Project / Job Content**

Contract vice president IT - head of the Asia Pacific Group

- Hong Kong Global Engineering and Infrastructure Support Team
- Responsible for communication between technical and helpdesk groups worldwide
- analysis of existing networks and the search for safety risks; Development of new risk solutions
- Development of solutions for existing networks - migration from existing systems to Windows

## **01/1997 - 01/1998**

### **1 Year 1 Months**

MERRILL LYNCH INTERNATIONAL INC., Hong Kong Senior Consultant

### **Job Content**

- Complete systems installation and implementation
- Network migration from Novell to Windows and Transaction Server
- Service, training of local engineers, system analysis, telecommunication connectivity, routers (3Com, Transcend, Cisco)
- TCP / IP, DHCP, WINS, Ethernet, trust relationships with networks in the US and Europe.
- Integration of NT 4 with FLASH (an SQL / Excel-based pricing model and trend manager for portfolio trading).
- Develop new applications such as charge calculator, IROS and Pagepool for stocks, bonds and portfolio trading
- Wrote pricing for a variety of Excel Macros models with live feeds from Reuters, Bloomberg, exchange channel and customer-specific applications from Merrill Lynch in New York and London (the pioneer of IP-based TV)
- Installed applications for the purchase and sale of products, messaging and notification for individual shares, bonds, portfolios. With: RAM Excel, RAM Add-Ins, Newport, Loan Manager, Bond Manager, IORS, K- Tek, PDD, DDE.
- Implementation of the first security requirements for banks in the investment business

## **01/1988 - 12/1996**

### **9 Years**

CONSULTANT / SENIOR SYSTEMS Engineer

### **Job Content**

- Customers including BOA, Deutsche Bank, BSI Machinery Germany, Indonesian Government, Thai Farmers Bank, Hoechst Chemicals Taiwan and Thailand, Anderson Singapore, SAP Germany.



- Mostly network planning and implementation. Experience in the financial world as well as the chemical industry and other industries
- There were also a lot of telecommunication tasks, including the planning of mobile networks, billing systems for Inmarsat, up-down-link interfaces to LANs.
- Planning and installation of a terminal server network for a leading Swiss banking group to overcome slow network connections and reduce costs by upgrading older PCs and notebooks to connect to NT / W 2000 / XP networks
- Experience in Packet Protocol, a protocol that was later applied to the basis for the GSM mobile phone systems installation and implementation
- Special projects, sales and installation of national UHF communications networks, as the forerunner of today's mobile communications. Customers in the Middle East and Asia.
- Development and production of the UHF components, including development of the first "Handy" ETACS, AMPS.
- Experience with A-network phone calls, development of the first satellite phone in the attaché case, encryption of mobile devices

**01/1985 - 12/1986**

**2 Years**

PATHCOM Inc., USA / Tokyo – Radio Communications Products

### Job Content

- RF Development Engineer for the Pathcom Group in USA, based in Germany.
- Developed the first free CB radio system, got the first ever issued approval of the FTZ in Darmstadt, set standards for the CB radio
- Technology development of new data communication products in the USA and Yokohama Japan
- Production control and documentation
- Developed the first Asian-made radio synthesizer, VHF and UHF transceiver and bundled mobile phone, system development and manufacturing of the Pathcom communication products

**01/1984 - 12/1985**

**2 Years**

Service for electrical, electronic equipment

### Job Content

SYNTHEX BEI Germany

### Industry sectors

(ISMS certification), German government, banks, DB Netz, Deutsche Bahn, BAMF, Enterprises, medium companies of all industries, Android expert, telecom providers, chemical companies, energy companies,...

### Languages

English  
German  
Chinese  
Spanish

### Focus

- Procurement and control of resources (internal / external)
- Interface to the customer and single point of contact in the area of security
- Sales and presale support
- Moderation of workshops
- Full responsibility for the coordinated transfer of the project results to the customer
- all aspects of IT and telecommunication (telecommunication) security from basic technology to the application layer. That means, from hardware to software development and consulting and consulting services
- Above all, over the past few years, I have been working in Big Data's infrastructure and mobile security environment with the aim of using Analytics technologies for new analytical concepts and actively seeking security anomalies to prevent and reduce attacks.
- Consulting the customer for the strategic orientation in the network and security sector
- The special strength lies in the mobile area, Android, IOS, Blacberry development of secure applications in payment traffic and e-commerce

## Products / Standards / Experiences

### Competencies

- IT consultant - project manager - product marketing
- Cyber security expert through training and experience
- Network security (with specialization for mobile networks)
- Cryptographic developments, software and hardware
- Development of new IT security methods and guidelines
- Marketing of new products and introduction of new ideas and solutions with regard to the latest cyber security incidents
- Software developer - hardware design and development
- IP services - VoIP - Transitions - Developments - Lets - Global / Enterprise Networks
- PKI / AES256, encrypted VoIP networks
- Specific knowledge and experience in the IT security architecture
- Analyze the customer's network security, develop and propose an efficient solution for updates and changes
- Training and support of global and local teams
- Professional HF technician, analogue and digital - 0-900 MHz, 900 MHz -6 GHz, 2G, 3G, 4G, LTE and higher, etc. Mobile devices and complete networks
- Design and development of hardware and software solutions, production management

### IT Knowledge

- OS experience: DOS, Windows 7.8.10, Windows NT 4.0, Exchange, Unix, Sun Solaris, Linux, Android, IOS, ....
- RDBMS: MS SQL Server, Sybase, Oracle Server
- Networks: TCP / IP, NetBIOS and NetBEUI, SNA, UNIX, X25, MS SNA Server, Ethernet, Token Ring, Mail server SMTP, POP, Imap, CCMail, Exchange, VoIP
- ADVA Optical Multiplexer Networking, SINA Secure Inter-Network Architecture for Fiber Optics, Cryptographic, Genoa
- Banyan Mail, Chat Server, News Server, Transaction Server, Exceed Platform, Novell, RAS, Windows.
- Telecommunications: Wireless systems, mobile phone networks, GSM, UTMS, CDMA, HSPDA, PCS, AMPS, 3G, 4G, LTE ...
- Frame Relay, ATM, Fiber Optics, ISDN. RF Propagation. Routers (Cisco, 3Comm, Bay Networks, Livingston, RAS, Access Server, etc.
- Mobile OS: Android, IOS, Windows, Blackberry, Linux

### Hardware Knowledge

- RF chip development - complete device development
- SD Security Chip and Semiconductor Design - Embedded Software
- NFC hardware and software
- RF and Mobile Development - CPU Development - Audio Chip Development - Video Chip Development
- Streaming media chip and embedded software - PCB development - layout - masking - manufacturing
- Mobile devices, portable imprints and passport / identification scanners

### Software Languages / Knowledge

- Practical knowledge of C / C ++, Perl, Mosaic OA, AB2, Pascal, Fortran, SQL, VB, Intel, GSM, AMPS, HTML, Java, Oracle, dBase, MS all applications, Linux, Android, IOS etc.
- Specialized in encryption, AES 256, PKI, FID, biometrics
- Encryption of mobile radio and wireless data system, cyber security expert since 1995 developed the first encrypted satellite telephone terminal (P2P technology)
- Develops the latest Internet banking security for mobile systems (FIDO-based)
- UAF password free, human factor identification, biometrically based FIDO and nurugo functions, etc

I am a senior network security expert (CISSP) with a broad understanding of the technology and the associated applications. My experience covers both areas, mobile networks and traditional networks.

"State often he kind" Security Architectures, BSI IT-Grundschtutz, ISO 27001, ISO 80001, IT Sig, Relevant Security in Federal Agencies - SG - Bamf- EHR-BDR and others, Enterprise Security .....

My focus is on all aspects of IT and telecommunications (telecommunication) security from basic technology to the application layer. That means, from hardware to software development and consulting and consulting services

Especially in recent years, I worked in Big Data's infrastructure and mobile security environment with the aim of using Analytics technologies for new analytical concepts and actively seeking security anomalies to prevent and reduce attacks.

The special strength lies in the mobile area, Android, development of secure applications in the payment traffic and e-commerce.

### Certifications

CISSP,AISP,CISA,CISM,MCP,ISO27001,BSI GRUNDSCHUTZ,PhD

## Industrial Experience / Consulting

- Banking - Secure banking via the Internet - Smartcard access
- MNC, Chemical, Electronics, Power Companies, Pharmaceutical ...
- Government VPN, Law Enforcement, Secret Service Agencies
- Automotive GPS internal electronics
- Transport and traffic, GSM-R
- Test and certification, BSC, MSC, BSS, NSS
- (E) Government - eBanking – eCompanies

## Technology Expertise

- Source code analysis, adaptations, extensions, corrections
- Risk management, risk / residual risk analysis
- IT / TK technology - for large industry and consumers
- Large networks, industry and the public sector
- Wireless and mobile (Android, Windows) networks
- Creation of documentation, support solutions
- Prototype design, manufacturing management
- Project Management, Big Data, Scrum, Kanban, MS
- Creation of test environments and necessary tools

## Education – Training

Certification

CISSP, AISP, CISA, CISM, MCP, ISO27001, BSI PRIVACY POLICY

Princeton United States

PhD in Telecommunications

Specialization Encryption of satellite phones

Oct 1980 - Sep 1982

Studies TU Darmstadt Electrical Engineering and Electronics, Mathematics, Physics

Graduate Engineer at Philip Reitz Polytechnic Frankfurt / Main

Jan 1999 - Dec 2000

Fernstudium Princeton University USA, for Phd. Dr.

Oct 1975 - Aug 1980

Internship, apprenticeship, journeyman, electrical master BEI Elektro, Wiesbaden

Jul. 1975

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