

# Dr. André Weimerskirch, MBA

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## EDUCATION

2008 - 2013

**Henley Business School**, Greenlands, England

- Master of Business Administration, October 2013
- Executive MBA
- Part-time in parallel to full-time employment

2001 - 2004

**Ruhr-University Bochum**, Bochum, Germany

- Dr.-Ing. (Ph.D.), Electrical Engineering and Information Technology, July 2004
- Thesis: Authentication in Ad-hoc and Sensor Networks
- Advisor: Prof. Christof Paar; Reader: Prof. Jean-Pierre Hubaux

1999 - 2001

**Worcester Polytechnic Institute**, Worcester, MA

- Master of Science, Computer Science, May 2001
- Thesis: The Application of the Mordell-Weil Group to Cryptographic Systems

**GPA: 4.0/4.0**

1995 - 1999

**Darmstadt University of Technology**, Darmstadt, Germany

- Double Major in Business Administration and Computer Science
- Second Major in Mathematics
- Pre Diploma October 1997 (BA/CS), Pre Diploma April 1998 (Mathematics)

**GPA: Ranked first (BA/CS)**

## EXPERIENCE

Aug. 2016 - today

**Vice President – Cybersecurity and Functional Safety, Lear Corporation**, Southfield, MI, USA

Heading Lear's global product cybersecurity and functional safety, including the cybersecurity engineering process, technology solutions, and partnerships.

Adjunct faculty at the University of Michigan, and Chair of the Mcity cybersecurity working group.

Jan. 2014 – today

**Consultant, Forecast Security Technologies, Inc., USA**

Strategic consulting and due diligence to identify acquisition targets and initiate company acquisitions

Technical consulting for automotive on-board cybersecurity and connected vehicle communication security.

Jan. 2014 –  
July 2016

**Associate Research Scientist, University of Michigan**, Ann Arbor, MI, USA  
Head of University of Michigan Transportation Research Institute's (UMTRI) cybersecurity and privacy efforts.  
Co-chair of the Mobility Transformation Center (MTC) cybersecurity working group.  
Vice-chair of SAE's Vehicle Electrical System Security Committee.

Mar. 2007 -  
Dec. 2013

**Chief Executive Officer and President, ESCRYPT Inc.**, Ann Arbor, MI, USA  
Co-founder of ESCRYPT Inc. Head of ESCRYPT's business in North America and Asia with offices in USA, Korea and Japan. Developed the future vehicle-to-vehicle safety communications security and privacy protocols and architecture for the USA deployment. Lead development of a vehicle-to-vehicle secure communication unit complying with the IEEE 1609.2 standard and initiated development of a public-key infrastructure product. Performed a large variety of risk assessments for industrial and high-tech customers, and designed legacy-aware cost-efficient secure systems.

2012 – 2013

**Managing Director, ESCRYPT GmbH**, Bochum, Germany  
Co-founder and Head of North America and Asia (South Korea, Japan and China) business. Established offices in Michigan, Seoul and Yokohama.

2004 -  
Feb. 2007

**Chief Technology Officer, ESCRYPT GmbH**, Bochum, Germany  
Co-founder and responsible for strategic planning and operative business. Set-up ESCRYPT to become widely known in the embedded security market. Performed Common Criteria certifications and production-level code development for the automotive industry. Worked intensely to evaluate and secure computing platforms (e.g. smart-cards, TPMs, and standard embedded controllers) and performed forensic security evaluation of Pay-TV hacks for court.

Oct. 2001 -  
Aug. 2004

**Research Assistant, Ruhr-University Bochum**, Bochum, Germany  
Doing my Ph.D. in pervasive and embedded security. Research in the area of security in mobile, ad-hoc and sensor networks, cryptographic protocols, efficient arithmetic, and applied cryptography. Performed teaching and student's supervising, and headed several industry projects.

Feb. 2003 -  
Aug. 2003

**Researcher, Aarhus University**, Aarhus, Denmark (fellowship)  
European Union full-time fellowship to do research as part of my Ph.D.;  
Worked on security protocols for embedded systems and ad-hoc networks.

July 2002 -  
Sept. 2002

**Researcher, Sun Microsystems Laboratories**, Mountain View, CA USA (internship)  
Did research in the area of efficient next generation cryptography;  
Implemented elliptic curve cryptography for a software library.

Jan. 2002 -  
June 2002

**IT-Consultant, Josteit, Herten & Partner**, Dusseldorf, Germany (part-time job)  
Consultancy in security related areas like PKI, Internet and application security, and vulnerability assessments.

June 2001 -  
Sept. 2001

**Researcher, Accenture**, Sophia Antipolis, France (internship)  
Analyzed security of wireless networks; Modeled new security policies and developed a biometric access control mechanism.

Aug. 2000 -  
May 2001

**Research Assistant, Worcester Polytechnic Institute**, Worcester, MA USA  
Doing my Master in cryptography. Worked on an industry project; helped organizing a large conference.

May 2000 -  
July 2000

**Researcher, Philips Research**, Briarcliff Manor, NY USA (internship)  
Worked on copy protection method for digital music; Analyzed a hardware random number generator; Studied cryptanalysis methods for DES.

Feb. 97 -  
July 99

**Web Developer, Deutsche Post AG**, Darmstadt, Germany (part-time job)  
Set up the Intranet with Lotus Notes; Designed and developed Workflow, Workgroup and Database applications; Consulted customers and in-house developers.

Dec. 98 -  
July 99

**Notes Developer, Darmstadt University of Technology**, Darmstadt, Germany (part-time job)  
Planned and implemented a Novell Network and Lotus Notes system; Analyzed extant workflows and implemented them.

Oct. 98 -  
Feb. 99

**Teaching Assistant, Darmstadt University of Technology**, Darmstadt, Germany  
Teaching Assistant for Operating Systems course. Advised, instructed and graded students.

March 96 -  
Nov. 96

**Network Administrator, Siemens AG**, Frankfurt am Main, Germany (part-time job)  
Administered a Windows NT network, maintained the e-mail system and performed troubleshooting of LAN computer systems.

May 95 -  
Jun. 95

**Network Administrator, Agrevo AG**, Frankfurt/Hoechst, Germany (internship)  
Administered the network, maintained a Microsoft Mail system, installed new PC equipment and upgraded software.

#### **ADVISORY BOARDS**

- University of Michigan Dearborn's Computer and Information Science (CIS) Professional Advisory Board
- University of Michigan Dearborn's Industry Advisory Board (IAB) for the Cybersecurity Center
- Oakland University's School of Engineering and Computer Science (SECS) Advisory Board

#### **AWARDS AND HONORS**

- 2011 SAE Arch T. Colwell Merit Award
- 2011 SAE Vincent Bendix Automotive Electronics Engineering Award
- Selected as expert by the European Telecommunications Standards Institute (ETSI) to define the European standard for vehicle-to-vehicle and vehicle-to-infrastructure secure communication.
- Transferpreis (Transfer Award) 2005 for technology transfer from academia to industry of rubitec (awarded with 10,000 €).

- European Union Marie Currie full-time fellowship for research visit at Aarhus University, Feb. 2003 - Aug. 2003.
- e-fellows.net scholarship 2001-2004.
- Selected by Sun Microsystems Laboratories for a full scholarship for the academic year 2000/2001.
- Full-time scholarship of German Academic Exchange Service (DAAD) 1999-2000.
- Best Pre Diploma out of 80 students in my field at Darmstadt University of Technology in the academic year 1997/98.

## **PUBLICATIONS**

See [www.weimerskirch.org/publications](http://www.weimerskirch.org/publications) for a full list of my publications and patents.

## **COMMITTEE MEMBER and EDITOR**

- Founder and Steering Committee of the annual escar USA (escar Embedded Security in Cars Conference, USA).
- Co-Editor of SAE International Journal of Transportation Cybersecurity and Privacy.
- Co-Organizer of SAE ComVEC Cybersecurity Session, 2015-2017.
- Program Committee of dozens of international workshops on cybersecurity and privacy.
- General Co-Chair of VANET 2010 (The Seventh ACM International Workshop on VehiculAr Inter-NETworking), In conjunction with ACM Mobicom 2010, Chicago, USA.
- General Co-Chair of VANET 2009 (The Sixth ACM International Workshop on VehiculAr Inter-NETworking), In conjunction with ACM MobiCom 2009, Beijing, China.

## **REVIEWER**

- Evaluator for the European commission as well as for European ministries.
- Reviewer of dozens of peer reviewed journals, conferences, and workshops.

## **TEACHING**

- Short-course at University of Michigan: Connected and Automated Vehicle – Cybersecurity
- Held several courses and workshops for industry including Daimler, TUV, Ford, and Toyota:
  - Introduction to Cryptography
  - Elliptic Curve Cryptography
  - Secure Car-to-Car Communication
  - Trusted Hardware in Embedded Systems
  - Automotive cybersecurity and privacy

## **CITIZENSHIP**

American and German citizen