CYBERSECURITY 360

PROGRAMME AND FACULTY OVERVIEW







AN INTERNATIONAL JOINT PROGRAMME FROM EIT DIGITAL AND UC BERKELEY EXECUTIVE EDUCATION

- Taking place in the San Francisco Bay Area, California and Munich, Germany.
- Programme Objective: Gain the cutting-edge cybersecurity awareness necessary for effective management decisions using the best US and European approaches shared by experts.

TOPICS

CYBERSECURITY GOVERNANCE

- Cybersecurity Governance and Management (EU Module)
- Cybersecurity Risk and Liability (US Module)

COMPLIANCE

- GDPR: Compliance, Enforcement and Consequences (EU Module)
- Data Privacy and Security (US Module)

CYBERSECURITY THREATS

- Human Threats: Social Engineering Techniques (US Module)
- Technological Threats: Vulnerabilities, Exploitations, Ethical Hacking (EU Module)

TECHNICAL APPROACH TO CYBERSECURITY FOR SPECIFIC ENVIRONMENTS

Industry 4.0 (EU Module)

- Internet of Things (EU Module)
- Networks (EU Module)
- Online, Platform and Cloud Services (US Module)

CYBERSECURITY OPERATIONS

Corporate Cybersecurity (US Module)

WEEK ONE BERKELEY, CALIFORNIA

MONDAY 05 NOVEMBER

AM Arrivals & Registration

PM Cloud Security and Privacy

TUESDAY 06 NOVEMBER

AM Silicon Valley's response to

Cybersecurity

Enterprise Security Architecture

PM Cybersecurity, Venture Capital and Legal Challenges

WEDNESDAY 07 NOVEMBER

AM Broad Spectrum Cybersecurity from IoT to the Cloud

Data Security and Advanced Blockchain Applications

PM Cybersecurity Threats and Human Operations - Successes and Failures

THURSDAY 08 NOVEMBER

AM Advancements in Artificial Intelligence for Cybersecurity

Cybersecurity Risks with Rapid Growth

PM Optional Site Visit 1

FRIDAY 09 NOVEMBER

AM Optional Site Visit 2

PM Departures

WEEK TWO MUNICH, GERMANY

MONDAY 26 NOVEMBER

AM Arrivals

PM CyberSecurity in Industry 4.0

TUESDAY 27 NOVEMBER

AM Network Security

PM Security in IoT

WEDNESDAY 28 NOVEMBER

AM Company Site Visit 1

PM Company Site Visit 2

THURSDAY 29 NOVEMBER

AM CyberSecurity Governance &

Management

PM GDPR: Compliance, Enforcement &

Consequences

FRIDAY 30 NOVEMBER

AM Technological Threats

PM Departures

Disclaimer: Topic dates within the programme may be subject to change.





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EUROPE MODULE FACULTY

| SESSION | TOPIC | FACULTY | |
|---------------------------|--------------------------------|---|--|
| Monday (PM) November 26 | Cybersecurity for Industry 4.0 | Christian Haas Fraunhofer IOSB, Karlsruhe | |
| Tuesday (AM) November 27 | Network Security | Manuel Carpio Intelsynet.com | |
| Tuesday (PM) November 27 | Security in the IoT | Bruno Crispo University of Trento | |
| Thursday (AM) November 29 | Cybersecurity Governance | Jan van den Berg Delft University of Technology | |
| Thursday (PM) November 29 | GDPR | Aurelie Pols mParticle | |
| Friday (AM) November 30 | Technological Threats | Juan Caballero IMDEA Software | |

Programme topics and faculty organized by Víctor A. Villagrá, CyberSecurity 360 Faculty Lead.

FACULTY MEMBERS



VÍCTOR A. VILLAGRÁ

CYBERSECURITY MASTERS DIRECTOR AT THE POLYTECHNIC UNIVERSITY OF MADRID AND CYBESECURITY 360 PROGRAMME FACULTY LEAD

Víctor A Villagrá is the Director of the Cybersecurity Masters Programme of the Polytechnic University of Madrid (UPM) and also has been an Associate Professor in UPM's Telecommunications Engineering School (ETSIT) since 1992.



JAN VAN DEN BERG

FULL PROFESSOR OF CYBERSECURITY AT **TUDELFT UNIVERSITY AND** LEIDEN UNIVERSITY AND SCIENTIFIC DIRECTOR OF THE CYBERSECURITY ACADEMY

Jan van den Berg is Professor of Cyber Security at Delft University of Technology and within the Institute of Security & Global Affairs (ISGA) at Leiden University. He is also Scientific Director of the Cyber Security Academy in The Hague.



AURELIE POLS

DATA PROTECTION OFFICER AT MPARTICLE

Aurélie Pols serves as Data Privacy Officer (DPO) for mParticle, a New York-based customer data platform. She is also a member of the Ethics Advisory Group for the EU's European Data Protection Supervisor (EDPS).



JUAN CABALLERO

DEPUTY DIRECTOR AT THE IMDEA SOFTWARE INSTITUTE

Juan Caballero is Deputy Director and Associate Research Professor at IMDEA Software Institute in Madrid. His research focuses on security issues in systems, software, and networks, including malware and cyberattacks. His research won a Best Paper at the USENIX Security Symposium and Most Influential Paper at the DIMVA Conference.



BRUNO CRISPO

CHAIR OF THE CYBER-SECURITY LABORATORY AND ASSOCIATE PROFESSOR AT **UNIVERSITY OF TRENTO**

Bruno Crispo is Chair of the Cyber-Security Laboratory established between the National Research Council and the University of Trento. He is a Member of the Executive Council of the National Inter-university Consortium for Informatics and a Member of the Scientific Committee of the National Research and Study Centre on CyberCrime of the Italian National Police.



CHRISTIAN HAAS

GROUP LEADER, SECURELY NETWORKED SYSTEMS AT FRAUNHOFER IOSB

Christian Haas is the Group Leader, Securely Networked Systems at Fraunhofer IOSB in Karlsruhe. His work focuses on network security, wireless sensor networks and security for industrial production systems. He was previously with the Institute of Telematics at the Karlsruhe Institute of Technology where he worked on projects for the Federal Office for Information Security and the Federal Ministry of Education and Research.



MANUEL CARPIO

VP OF CONTINUAM. EX CHIEF INFORMATION SECURITY OFFICER (CISO) OF TELEFÓNICA

Manuel Carpio is VP of CONTINUAM (Spanish Business Continuity Association). He was formerly Chief Information Security Officer (CISO) for Telefónica and Secretary of their Corporate Security Committee. He founded the Spanish Private CISOs Association and has contributed to policymaking in Europe and Latin America.

Visit the Cybersecurity 360 webpage at eitdigitalx.eu/cybersecurity360 for the full faculty bios

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US MODULE FACULTY

| SESSION | TOPIC | FACULTY |
|---------------------------|---|--|
| Monday (PM) November 6 | Cloud Security and Privacy | Tim Mather Chief Security Strategist, PatternEx |
| Tuesday (AM) November 7 | Silicon Valley's Response to Cybersecurity | Andrew Isaacs UC Berkeley |
| | Enterprise Security Architecture | Eric Johnson CIO Talend |
| Tuesday (PM) November 7 | Cybersecurity, Venture Capital and Legal Challenges | Pedram Mokrian Stanford University |
| Wednesday (AM) November 8 | Cybersecurity from IOT to the Cloud | Mark Egan Former CIO, Symantec, VMWare |
| | Cybersecurity Threats & Human Operations - Successes & Failures | Omer Ayfer Merritt College |
| Wednesday (PM) November 8 | Advancements in Artificial Intelligence for Cybersecurity | Sheldon Waggener Former CIO, UC Berkeley |
| Thurdsday (AM) November 9 | Cybersecurity Risks with Rapid Growth | Michael Jordan UC Berkeley |
| | | Lars Rabbe Former CIO, Yahoo, Skype |

FACULTY MEMBERS



ANDREW ISAACS

FACULTY LEAD

PEDRAM MOKRIAN PRINCIPAL AT MAYFIELD **FUND**



TIM MATHER CHIEF SECURITY STRTEGIST AT PATTERN EX

Andrew Isaacs is a successful scientist, business executive, entrepreneur, and educator. He is passionate about mentoring the next generation of business leaders and has a strong track record of helping entrepreneurs launch their careers. Isaacs has worked at the crossroads of Silicon Valley technology and business innovation for 32 years, 16 of those years at UC Berkeley, helping start-ups and established companies create and execute successful leadership strategies. He is ranked one of the Top 15 professors in the US by 360Career.

Isaacs joined the UC Berkeley faculty in 1999. In 2000 he was appointed Executive Director of UC Berkeley's Management of Technology Program, the joint program of the Haas School of Business and College of Engineering. Since 2006 he has served as Faculty Director of UC Berkeley's Center for Executive Education.

Pedram Mokrian's expertise lies at the intersection of how new technologies (connected devices, mobile, software systems), analytics (big data stack), and new business models (consumer marketplaces, product driven services) can disrupt large incumbent markets such as energy, manufacturing, logistics, education, and commerce.

Mokrian is a Principal at Mayfield Fund, a global venture capital firm with \$3 billion under management and a long history of backing world class entrepreneurs and investing in relationships. Since its founding in 1969, Mayfield has invested in more than 500 companies, taken more than 100 public, and 100 have merged or were acquired.

Prior to Mayfield, Mokrian has been a member of the commodities trading desk at Credit Suisse in New York.

Tim Mather is an information security executive with more than 30 years of experience. He is an advisor and / or angel investor for / to several information security start-ups (e.g., CyCognito, DarkBytes, GhangorCloud). His specialties include cybersecurity / information protection, PKI,

As Chief Security Strategist at PatternEx, Mather helps to bring artificial intelligence (active machine learning) to information security through the near real-time analysis of massive quantities of log data (e.g., syslog, Bro, DNS).



MARK EGAN

PARTNER AT STRATAFUSION GROUP, INC.

Mark Egan is a partner at StrataFusion Group, Inc. and has more than 25 years of information technology experience, with expertise in IT transformation, information security, and mergers & acquisitions. His extensive experience includes managing

global IT organizations with over 1,200 employees, budgets in excess of \$350 million, and IT integration for over 60 mergers and acquisitions. He has been repeatedly recognized for his leadership and success in scaling IT organizations to support rapid growth companies.

Prior to joining StrataFusion, Egan was a CIO at VMware where he led the company from a server virtualization vendor with \$2 billion in revenue to a \$5 billion market leader of cloud solutions. During his 6 years as CIO at Symantec, his leadership in IT was instrumental in supporting the company's transformation from \$600 million consumer software publisher to a \$5 billion market leader of enterprise security solutions. He held senior level positions with companies in a variety of industries, including Sun Microsystems, Price Waterhouse, and Wells Fargo Bank. Mark Egan is author of Executive Guide to Information Security: Threats, Challenges, and Solutions and was a contributing author of CIO Wisdom, CIO Perspectives, and CIO's Body of Knowledge.





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FACULTY MEMBERS

SHELTON

BERKELEY



WAGGENER CIO AND ASSOCIATE VICE CHANCELLOR OF UC

Shelton Waggener has been the CIO and Associate Vice Chancellor of UC Berkeley between 2003 and 2012. In this role, he has been the most senior technology executive on the Berkeley campus, reported to the Chancellor and the Provost. He has been a member of the Chancellors Cabinet and the Chair of the UC System-wide CIO leadership council.

Waggener is currently the President of The CIO Perspective, a boutique consulting firm supporting assessment, evaluation, market viability, and go to market strategy for cloud enterprise technology solutions. He led and participated on technology advisory boards for startups and midcap technology providers as well as Silicon Valley Venture Capital firms. Waggener serves as acting CTO or CIO for firms up to \$250 million in revenue.



ERIC JOHNSON SENIOR VICE PRESIDENT AND CIO OF TALEND

Eric Johnson is a CIO with a proven track record of strategic visioning, delivery of complex enterprise cloud solutions and leading digital process transformation. He has demonstrated strong success in growing and leading global IT organizations and fostering collaboration in a virtual work environment.

Johnson's expertise includes global IT strategy, digital transformation, advanced data analytics, leading global teams, go-to-market, mergers and acquisitions, SaaS and hybrid IT and innovation. His specialties are digital transformations, cloud-based application strategies/solution implementations, On Premise (ERP, CRM, SCM), eCommerce, business process design, solution development, portfolio/project management, offshore/outsourcing and strategic vendor management.



MICHEAL JORDAN FULL PROFESSOR AT UC **BERKELEY**

Michael Jordan is Full Professor at UC Berkeley in machine learning, statistics, and artificial intelligence. He is one of the leading figures in machine learning, and in 2016 Science reported him as the world's most influential computer scientist. Jordan's appointment is split across the Department of Statistics and the Department of EECS. He was a professor at the Department of Brain and Cognitive Sciences at MIT from 1988 to 1998.

Jordan has received numerous awards, including a best student paper award (with X. Nguyen and M. Wainwright) at the International Conference on Machine Learning (ICML 2004), a best paper award (with R. Jacobs) at the American Control Conference (ACC 1991), the ACM - AAAI Allen Newell Award, the IEEE Neural Networks Pioneer Award, and an NSF Presidential Young Investigator Award. In 2010 he was named a Fellow of the Association for Computing Machinery "for contributions to the theory and application of machine learning."



OMER AYFER ADJUNCT PROFESSOR AT MERRITT COLLEGE

Omer Ayfer is an Adjunct Professor at Merritt College where he teaches a variety of courses in the premier cybersecurity program at the community college level. He also delivers talks on topics such as blockchain and cryptography to a wide variety of audiences including as a guest lecturer at the Haas School of Business.

As Principal at Ayfer Network, he provides fractional CIO services to technology startups. with a focus on cloud-based infrastructure and information security, helping them find the right direction for their business. Clients include biotechnology and Internet technology startups.

Ayfer also serves as part-time CIO at Illumina Ventures, supporting both the VC team as well as the portfolio companies, with a focus on cloud infrastructure, information security strategy and overall technology well-being.



LARS RABBE SENIOR EXECUTIVE/CIO

Lars Rabbe is a Senior Executive / CIO with experience in companies such as Skype, Intuit, Yahoo, Lucent Technologies, Fidelity Investments, Redback Networks, Octel Communications and NeXT Computer.

Rabbe managed groups of over 1,500 employees in over 50 countries with budget responsibility of over \$1 billion. He successfully developed, acquired and implemented large company-wide systems in many industries including high tech, financial services, media and retail.

in both large and small environments with experience in outsourcing on-shore and off-shore. He serves on several boards and advisory boards.

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Rabbe has a track record as change agent





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