

DR. YASSER MORGAN, P.ENG

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PROFESSIONAL PROFILE

- Results-oriented, self-motivated software engineer with thirty years of experience in technical research and tool development for institutional clients, fundraising through government grants and preparing grant proposals for research projects. Highly skilled in overseeing research activities, supervising students, managing and mentoring cross-functional teams of product managers, engineers, and legal to execute key strategic partnerships.
- Experienced in creating, implementing, monitoring, and improving business development strategies to realign with corporate mission and objectives.
- Supported organizations with the development of ISO 27001 documents to protect their critical information assets to comply with applicable legal and regulatory requirements.
- Contributed to various standards like WiMAX, IEEE WiFi, IEEE DSRC, IEEE 802.11p, and IEEE P1609.1/.2/.3/.4, IETF, 3GPP standards.
- Lobbied standards communities to improve the development of (security) standards and to enrich innovative business capabilities.
- Contributed to the NIST Cybersecurity Framework (NIST-CSF 2.0), NIST Priority System, and NIST Privacy Controls.
- Selected by the Canadian Centre for Security Sciences to design the DRDC Public Safety "[Security-Grades Framework for Mobile Devices](#)".
- Researched, published, and elevated security frameworks for many years.
- Lobbied standards communities to improve the development of (security) standards and to enrich innovative business capabilities.
- Sole Patent Holder of International Patent PCT No. EP2598913 A4, "[A Method and System for Cooperative Stochastic Positioning in a Mobile Environment](#)", patent granted August 2010.
- Well known for swift results and the ability to shift priorities in rapidly changing environments. Proven ability to resolve complex multi-dimensional problems. Strong team player and creative problem solver.

Behavioral attributes: Team-oriented, flexible, good interpersonal and communication skills, problem solver.

TECHNICAL SKILLS & KNOWLEDGE

- Deep knowledge of Cybersecurity's Critical Security Controls (**CIS v8**).
- NIST Cybersecurity Framework (**NIST-CSF 2.0**), NIST Priority System, and NIST Privacy Controls.
- Ripened comprehension of the USA CIO policies, priority framework, and managing security governance issues.
- Enhanced comprehension of **ISO 27001** information security standard.
- Experience with cybersecurity assessments, roadmaps, vulnerability management, and incident response.
- Designed and supervised many ANN, SVM, and Fuzzy as tools for AI-deep learning.
- Subject Matter Expert (SME) in Security Risk Assessment and Management, and Cloud Security, taught classes at the graduate level.

PROFESSIONAL EXPERIENCE

UNIVERSITY OF REGINA, REGINA, SASKATCHEWAN, 2007 - 2023
Public University in the Province of Saskatchewan since 1974

Professor, Software System Engineering Faculty of Engineering & Applied Science

Oct 2007 – April 2023

Responsible for the development of grant proposals, operating R&D projects, supervising students, mentoring junior colleagues, and supporting the operational needs of my department and faculty.

- Founded, managed, and grew the Bridging Research and Innovation Centre (BRiC) at the university to perform research on LTE Public Safety Broadband Networks (PSBN). Established cooperation with
 - Texas A&M University
 - Saskatchewan Research Network Inc. (SRNET)
 - Public Safety Canada
 - Royal Canadian Mounted Police (RCMP)
 - Canadian Interoperability Technology Interest Group (CITIG)
 - SaskTel
 - Edge Innovation Network (EDGE)
 - Canadian Network for the Advancement of Research, Industry, and Education (CANARIE)
 - Industry Canada
 - Defence Research Development Canada (DRDC) and Centre for Security Sciences
 - Canadian Advanced Technology Alliance (CATA)
 - SaskPower
- Studied and researched specific security issues for DRDC. Most reports are classified, but this one is available: "[Public Safety Grade Mobile Application Management Framework \(PSG-MAMF\)](#)", developed for Defence Research and Development Canada (DRDC), Centre for Security Science, Ottawa ON, Canada (CSS), and Government of Saskatchewan. Report #: DRDC-RDDC-2018-C203, pp. 213, October 2018.
- Contributed to the creation of the NIST Cybersecurity Framework (CSF 2.0), NIST Priority System, and NIST Privacy Controls.
- Studied and proposed governance policies and procedures to secure positioning systems to meet stringent ITS-Canada requirements.
- Sole inventor of the International Patent (PCT No. EP2598913 A4), "[A Method and System for Cooperative Stochastic Positioning in a Mobile Environment](#)", August 2010.
- Studied and proposed improvements to the SCADA system relevant to IDE triggers and critical secure message propagation for SaskPower.
- Taught classes to undergraduate and graduate students, and supervised theses.

PYLON SYSTEMS INC., OTTAWA, ONTARIO, 2004 - 2007

Executive Director & Co-Founder

Jun 2004 – Sept 2007

R&D consulting for multiple projects focused on the IEEE standards and the development of IEEE 802.11p. The job involved extensive travel to the USA and supervising real-time-embedded systems for vehicular communications alongside the USA-DoT. As a project manager, I managed a budget of about \$10M/year.

- Contributed to the development of IEEE P1609.1/.2/.3/.4 (P1609. x) standards geared towards wireless vehicular communications.

- Directed and supervised 16 developers who were responsible for building a Dedicated Short-Range Communications (DSRC) system following the IEEE 802.11p, P1609. x initiatives.
- Participated in IEEE 802.11p Sub-working Group which was responsible for the design and development of the 802.11p/1609.1/.2/.3/ and .4 standards.
- Travelled across the US soliciting input on WAVE 1609.x security challenges. Conducted security audits, and Application Security Reviews periodically.
- In charge of designing the prototype for the DSRC v0. This includes budgeting, writing proposals, bids, SOW, hiring, scheduling, and planning the implementation project. In charge of the UML design, in charge of the PDR and CDR presentations, and the approval process. In charge of the implementation team till completion.
- Offered Subject Matter expertise on vulnerability remediation relevant to Connected Vehicle and DSRC leading to improvements in 1609.x WAVE standards.
- In charge of a research project for enhancing functionalities for WSMP, and another one for finding alternative solutions for critical routing mobility issues.
- Initiated and led to the completion of a project to measure 5.9 GHz performance to compare the iChannel (DENSO) with the classic RSU/OBU channel switching mechanisms.
- Consultant and project manager with the NCIT (National Capital Information Technology) in cooperation with both Carleton University and the NRC (National Research Council).

SIEMENS CANADA, KANATA, ONTARIO, 2001 - 2004

Director, Research & Development

Apr 2001 – May 2004

Responsible for the entire R&D within Siemens Canada. Running multiple projects while relying on project managers for each project. I had the overall view of the entire system including multi-site development in Singapore and Munich.

- Directed and supervised approximately 25 engineers, responsible for monitoring many wireless-related (3GPP/IETF/IEEE) standards in North America to maintain technical and strategic advantage for Siemens.
- Manager and leader of an architecture group working on Network Management Architecture using the 3GPP IMS architecture for the core network.
- Project Manager for the SMLC (Service Management Location Control) based on GPRS technology. Consulting, integration, and implementation for the SMLC security management.

NORTEL NETWORKS, OTTAWA, ONTARIO, 1998 - 2001

R&D Manager,

Dec 1998 – Mar 2001

Responsible for software development within the 1XRTT system.

- Designed and implemented ALIF wireless access system, a next-generation wireless access system for 3G+.
- Identified Nortel's policy schema for mobility and designed a policy editor. Enhanced the COPS protocol to deal with virtual PEP.
- Participated in the generation of (IETF) EDHCP for mobile solutions.
- Played a leading role in the design of IP header compression under MPLS.

3M INNOVATION – AIT CORPORATION, OTTAWA, ONTARIO, 1995 - 1998

Manager, Software & Firmware

Jan 1995 – Nov 1998

Responsible for planning, designing, reviewing, and recommending modifications to the generation, transmission, and distribution facilities-

- Directed and supervised approximately 19 developers, the team was responsible for the development of a new OCR/ICR engine. The engine was implemented on schedule and adopted by SITA in 1997 as a benchmark for OCR testing.

EDUCATION

- Ph.D. Computer Science, Carleton University, Ottawa, ON
- MSc Computer Science,
- BSc Computer Science
- Certificate of Citizen Police Academy, Regina Police Services, Regina, SK

TECHNICAL COMMITTEES

- Many IEEE committees (standards and local chapters)
- APEGS (joined working committee for engineering students)
- Many formal committees, such as hiring, auditing, and others.

PROFESSIONAL MEMBERSHIPS

- Member, Association of Professional Engineers & Geoscientists of Saskatchewan, Canada
- Member IEEE, New York, USA

AWARDS & RECOGNITION

- Public Sector Leadership Award (2016) presented by Wilfred Laurier University in recognition of my significant contribution to the development and application of advanced technologies in Canada.
- One of two graduates nominated by Carleton University for the NSERC Award to support the adoption of academic innovation into industry applications.
- Golden Pride Award, Nortel Networks. Canada. July 2000 for speeding up the MFRM-I2C bus data transfer rate by four times.
- Scholarship of a distinguished student from the Society of Computer Engineers. UK, 1993.
- Award of distinguish as best student ISSR, Cairo University, October 1992.

PUBLICATIONS

- Please check my [Google Scholar](#) page.

REFERENCES

Furnished upon request.