

## PROFILE

- Section Head of Manitoba Hydro's Telecommunications Maintenance Engineering
- APEGM 2015 Member-In-Training Award Finalist for exceptional work achievement as an EIT
- Highly organized with excellent communication skills and remarkable attention to detail
- Technical and leadership experience in the design, implementation, maintenance and operation of telecommunication systems including but not limited to Microwave, Lightwave, WiMAX, Digital Mobile Radio, IDN, SRA, NERC Compliance (CIP, PRC, COM), Teleprotection, and Power Line Carrier systems

## EDUCATION

- 2014 Post Baccalaureate Diploma in Engineering (Electrical)**  
Dean's Honour List Graduand  
Internationally Educated Engineers Qualification (IEEQ) Program  
University of Manitoba – Winnipeg, Manitoba
- 2011 Bachelor of Science in Electronics & Communications Engineering**  
Dean's Honour Roll  
De La Salle University – Manila, Philippines

## RELATED WORK EXPERIENCE

- 2015 – present Telecommunications Maintenance Engineer**  
Manitoba Hydro – Communications Department  
820 Taylor Avenue, Winnipeg, Manitoba

Performs diversified tasks that directly support the operation and maintenance of Manitoba Hydro's telecommunications systems by providing technical expertise required for the implementation, maintenance, operation, ongoing enhancement and support of systems including but not limited to Security Measures, Microwave and Lightwave carrier systems, WiMAX, Optical Fibre and Metallic cable systems, Teleprotection and Power Line carrier systems, the Industrial Data Network (IDN), Secure Remote Access (SRA) system, and Mobile Radio system on corporate or leased telecommunications facilities:

- Provides operational maintenance engineering support to Telecommunications staff, System Control, System Support, Station Design, Information Technology and other departments.
- Monitors and supports the day to day operation of the networks through network support systems and provide direction and technical support to the Telecommunications Network Operations Centre (TNOC) and field support staff.
- Consults and negotiates with manufacturers, external vendors and suppliers to resolve equipment failures, unsatisfactory performance, and maintenance contracts.
- Collaborates with corporate officers to support internal processes and policies necessary to provide for NERC Cyber Security and Protection Reliability compliance and reporting.
- Functionally leads technical staff in various groups within the Telecommunications Department, who directly support the operation and maintenance of Manitoba Hydro's telecommunications systems.
- Actively maintains technical expertise in this field of knowledge, equipment, industry trends, practices and standards and maintain contacts in other electric and telecommunications utilities.

## 2013 – Radio Networks Designer

2015 Manitoba Hydro – Communications Department  
820 Taylor Avenue, Winnipeg, Manitoba

Performed complex and diverse tasks in the development of corporate wireless telecommunications networks as required for power system protection, telemetry, remote control, and mobile voice and data operations communications. This includes the following principal duties:

- Provide complex and non-routine technical interpretation and analysis and apply engineering and industry standards for the selection and development of corporate microwave, mobile voice, and wireless data radio communications networks including radio frequency propagation and coverage analysis, and test equipment specification.
- Provide related equipment systems designs, technical specifications, procurement and selection activities, engineering drawings, installation work descriptions, project coordination, commissioning procedures, and related contracts administration.
- Provide related radio frequency spectrum and telecommunications tower licensing and regulatory requirements with Innovation, Science, and Economic Development Canada (formerly Industry Canada) including the analysis of radio frequency interference and radio frequency safety.
- Direct the activities of technical support staff and provide related functional leadership of project team members, field technicians, and contractors that require on-site support of project activities.
- Assist internal and external engineering and project management staff in planning, scheduling, cost estimating, and cost control of related projects including radio tower sharing requests and joint-use facilities agreements.

## VOLUNTEER WORK

### 2012 – present Engineering Mentor

- Provide one-on-one and group orientations for new immigrants with engineering backgrounds regarding professional engineering practice in Manitoba.
- Act as a mentor giving advice on options that are available in getting their degree recognized.

## PROFESSIONAL DEVELOPMENT SEMINARS

2017 MIC/MUG & UTC Region 5 Conference / Bismarck, North Dakota

*The only Canadian delegate to attend the 2017 MIC/MUG & UTC 5 Conference representing Manitoba Hydro.*

2014 Canadian Nuclear Association Conference and Trade Show / Ottawa, Canada

*Selected for the second year in a row as one of the Top 40 students across Canada to attend the nuclear conference/trade show in Ottawa.*

2013 Canadian Nuclear Association Conference and Trade Show / Ottawa, Canada

*One of the Top 40 students across Canada selected to attend the nuclear conference/trade show in Ottawa.*

*Selection based on my essay: "Eliminating the Barriers to Understanding the Benefits of Nuclear Technology"*

## PROFESSIONAL MEMBERSHIPS AND AFFILIATIONS

2017 – present Professional Engineer, Engineers Geoscientists Manitoba (EGM)

2016 – present Vice President for Communications, Filipino Members Chapter - EGM

2016 – present Chair, IT & Communications Committee – Filipino Members Chapter - EGM