

Nikhil Thomas Joy

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4A Electrical 🇨🇦 +1 519 504 6465

WATERLOO
ENGINEERING

Skills Summary

- » Over 6 years of programming experience
- » Passionate about Energy Solutions, and Software Development, particularly open-source efforts
- » Strong leadership and communication skills
- » Efficient in a fast-paced environment with minimal aid or supervision
- » Able to grasp new concepts and technologies and use them effectively
- » **Technologies:** Node.js, Angular.js, Python, Java, C++, SQL, MS Access, AutoCAD, PVSyst, PSS/E, MATLAB

Candidate for Bachelor of Applied Science Sept 2011 - Present University of Waterloo
Electrical Engineering, Computer Engineering Option

- Cumulative GPA: 90.12, appearing on Dean's Honour List for 3 Academic Semesters
- Completed International Exchange at Lund University, Sweden
- Achieved A1 certification in Swedish and French
- **Relevant Courses:** Digital Communication, Electric Power Systems, Electrical Distribution Systems, Algorithms and Data Structures, Cooperative and Adaptive Algorithms

Education

Software Engineering Intern

Jan 2015 - Apr 2015

Waterloo, ON

Seeq

- Spearheaded effort to integrate manual tests into testing framework using ideologies from Behaviour Driven Development utilizing Node.js, Cucumber.js, Embedded JavaScript (EJS), Bootstrap, and jQuery
- Authored scripts using Node.js to dynamically query JIRA for completed tickets for automated Release Notes generation with EJS when product executable is built
- Integrated Flux-Angular into portions of Seeq's Angular application for "state"-ful data flow
- Addressed various bugs in Seeq's application front-end, and added Jasmine Unit Tests to improve overall code coverage

Systems Engineering Associate

May 2014 - Aug 2014

Toronto, ON

ENDURAenergy

- Generated PVSyst simulations to simulate shading analysis and annual specific power production for rooftop and ground-mount solar energy projects
- Designed systems using AutoCAD, Ontario Electrical Safety Code, and other standards to fulfill Connection Impact Assessment (CIA) and Electrical Safety Authority (ESA) Submissions
- Conducted research, writing Python scripts, accessing impact of snowfall, and ambient temperature on power production losses co-relating sensor data from project sites and weather statistics from Environment Canada
- Headed Database development using Google Docs, and Google App Script to meet project specifications

Part Time Teaching Assistant (MATH 119)

Jan 2014- Apr 2014

Waterloo, ON

UNIVERSITY OF WATERLOO

- Taught first year undergraduate students the concepts of Calculus 2, while developing teaching skills and further assisting students with homework and textbook problems.

Power System Modelling Engineering Intern

Sept 2013 - Dec 2013

Burnaby, BC

BChydro 

- Undertook the responsibility of updating the model of the Albertan electrical system, such that it can be effectively incorporated in bulk system planning and future Western Electricity Coordinating Council (WECC) base cases.
- Used PSS/E, Python, AWK, FORTRAN, C#, as well as command line prompts of PSS/E to further develop the in-house "Base Case Generator."

Work Experience



Power System Model Management Intern Jan 2013 - Apr 2013 Calgary, AB

- Performed PSS/E simulations of Alberta Interconnected Electric System, delivered base cases (Power Flow Studies), and maintained power transmission system asset database (TASMo)
- Analyzed project specifications sent in by Transmission Facility Operators with single line diagrams
- Prepared custom Python scripts to automate and optimize company procedures by tenfold



Multimedia Application Developer Apr 2012 - Aug 2012 Waterloo, ON

- Took charge of the smartphone component of the project, comprising of design aspects of front-end development in ActionScript such as audio-video streaming, SMS, and email features
- Learned Java and XCode for native implementation on both iOS and Android while using SVN repositories to monitor project progress

Work Experience

Extracurriculars

Engineering Ambassador

University of Waterloo Faculty of Engineering

Jan 2012 - Apr 2014
Waterloo, ON

- Participated in various Engineering Outreach events such as March Break Open House, Engineering Explorations, Shadow Day, Ontario University Fair
- Displayed dedication and commitment by advocating my opinion on why Engineering is my passion and why others should pursue Engineering as a career

Vice President

University of Waterloo Indian Connection

Jan 2012 - Apr 2014
Waterloo, ON

- Handled overall performance of the club, brainstorming new events, and promotion of the club to the UWaterloo student population through marketing through Facebook, designing posters with Photoshop and Illustrator, and outreach using Twitter and other social media
- Ensured the club adheres to its mission in catering to UWaterloo's Indian student population and helping international students in their transition to a new home

Academic & EngSoc Representative

University of Waterloo

Sept 2011 - Apr 2014
Waterloo, ON

- Represented the ECE 2016, making important decisions on policy and budgets, displaying ongoing dedication through the relay of this information to the class
- Represented the class to the department and acting as the liason between the professors and the students and thus solving multiple problems that may arise such as class scheduling, lecture content, etc.

- » University of Waterloo President's Scholarship of Distinction, University of Waterloo
- » Nortel Networks Undergraduate Scholarship, University of Waterloo
- » QEII - Aiming for the Top Scholarship, University of Waterloo
- » University of Waterloo International Experience Award, University of Waterloo
- » SWEA International Toronto Inc. Travel Scholarship, Swedish Women's Educational Association Toronto
- » Siemens Canada Academic Achievement Award Scholarship, Electro-Federation Canada

Awards

Interests

- » Avid photography enthusiast, nature-lover, and seasoned traveller
- » Aspiring polyglot - Knows French, Swedish, Hindi, Malayalam and 1 phrase in 11 different languages
- » Fond of Billiards, Poker, and Chess
- » Enjoys Soccer (on Intramural team), Tennis, and Swimming