William D. Ehrich

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Education

Northwestern University (Evanston, IL)   *Sept. 2016 – Mar. 2018*
Degree: Master of Science (MS) in Computer Science | **GPA:** 3.94/4.00
Thesis: *Cost Estimation for Query Optimization in Distrustful Data Federations*
Coursework: • Design and Analysis of Algorithms • Biometrics • Introduction to Computer Graphics
• Human Computer Interaction • Introduction to Database Systems • Machine Learning
• Internet of Things • Readings in Database Systems • Operating Systems • Artificial Intelligence

Northwestern University (Evanston, IL)   *Sept. 2009 – Jun. 2013*
Degree: Bachelor of Science (BS) in Chemical Engineering

Work

Software Engineering Intern – The Boeing Company (Berkeley, MO)   *Jun. 2017 – Aug. 2017*
- Performed a trade study on porting functionality from an SDK application to IDE plugins, developed proofs-of-concept from the ground up, and documented findings in a six-page report
- Presented findings to an engineering review board, consisting of senior engineers, technical fellows, and engineering managers

Technical Support Engineer – OSIsoft, LLC (San Leandro, CA)   *Sept. 2013 – Jun. 2016*
- Resolved issues with the design, implementation, and use of OSIsoft, LLC's proprietary PI System software, closing over 1,000 cases

Research

Research Assistant – EECS Department, Northwestern University   *Sept. 2017 – Mar. 2018*
- Investigating secure querying for federated databases under Professor Jennie Rogers

Projects

Facebook Comment Volume Prediction | Python, NumPy, scikit-learn   *Apr. 2017 – Jun. 2017*
- Developed regression trees and neural nets to predict numbers of comments on Facebook posts

Smart Space Heater | Java, Raspberry Pi, IBM Bluemix, Twilio   *Apr. 2017 – Jun. 2017*
- Implemented a home Internet of Things temperature monitoring and notification system

Organizations

Institute of Electrical and Electronics Engineers (IEEE) at Northwestern   *Jan. 2017 – Mar. 2018*
- Serving on executive board, helping plan hackathons and social events

Volunteering

Graduates Mentoring Undergraduates (GMU) at Northwestern   *May 2017 – Mar. 2018*
- Providing academic and career advice to an undergraduate computer engineering student

Splash at Northwestern   *Apr. 2017*
- Taught an introductory class on developing websites with HTML to 12 high school students

Skills

Object-Oriented Programming (OOP) Languages: Python (NumPy, scikit-learn), Java, C++, MATLAB
Other Languages: HTML, CSS, JavaScript, SQL, Git, XML, Bash, Windows Batch, PowerShell, LaTeX
Integrated Development Environments (IDEs): PyCharm, Eclipse, Visual Studio, WebStorm, Cloud9
Other Software Tools: MySQL, MS SQL Server, GitHub, Bitbucket, UltraEdit, Weka, IIS, PI System