

Alex J Watras

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ELECTRICAL ENGINEER

Seeking an Entry-Level Position in the Automation and Technology Innovation Sectors

Recent graduate with BS Electrical Engineering/BS Applied Math and experience as a Linux System Administrator for the Space Science and Engineering Center, University of Wisconsin-Madison. Possess the analytical abilities and technical skills necessary for innovative engineering and computational applications. Solid understanding of electrical engineering theory, circuit design and analysis, digital systems fundamentals, digital signal processing, feedback control systems, optoelectronics and higher math.

EDUCATION

University of Wisconsin-Madison, Madison WI (2011-15)

Bachelor of Science in Electrical Engineering, GPA: 3.259 5/2015

Bachelor of Science in Mathematics (Applied with Computer Science emphasis), 5/2015

- **Activities and Leadership:** IEEE, Student Member ■ BAM, Vice President
 - **Senior Capstone Design Project (semester 1):** Designed FIR and IIR digital filters to isolate and remove noise from EKG signals.
 - **Senior Independent Study Project (semester 2).** Sensor integration and signal processing in a biomedical diagnostic application (ongoing project). Currently serving as project coordinator and team leader under direction of EE and BME faculty advisors.
 - **Relevant Courses:** Digital Signal Processing, Signals and Systems, Digital Systems Fundamentals, Feedback Control Systems, Optoelectronics, Electrodynamics, Electronic Circuits, Circuit Analysis, Data Structures, Numerical Methods (Also Calculus I, II, III (honors level); Differential Equations (honors level), Combinatorics, Numerical Linear Algebra, and Real Numerical Analysis)
 - **Publications:** Watras, C. J., J. S. Read, K. D. Holman, Z. Liu, Y.-Y. Song, **A. J. Watras**, S. Morgan, and E. H. Stanley (2014), Geophys. Res. Lett., 41, 456–462, doi: [10.1002/2013GL058679](https://doi.org/10.1002/2013GL058679)
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EXPERIENCE

THALCHEMY INC., 1605 Monroe St. Suite 8, Madison, WI, 53711

Audio Engineering Specialist, Summer 2015

Designed Algorithms to Improve a speech processing engine. In charge of voice detection and noise suppression algorithms.

SPACE SCIENCE AND ENGINEERING CENTER, University of Wisconsin, 1225 W. Dayton St, Madison, WI 53706 **Linux System Administrator (Student)**, 2013 –Present

Responsible for network trouble shooting, upgrades to operating system, software and hardware, as well as client services under direction of senior SSEC staff.

Technology Summary

MATLAB, Maple, Quartus, Java, Python, C

Honors and Awards

National Merit Scholar, 2011; Kemper Knapp Scholar, 2011-12; Reynolds Scholar, 2014-15