Joseph G. Lukasik

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EDUCATION

University of Wisconsin-Madison September 2012-Present

Degree: Bachelors of Science expected May 2016
Major: Computer Science and Mathematics, with a Physics certificate
GPA: 3.852 / 4.0

WORK EXPERIENCE

Linux Systems Administrator February 2014-Present

Student sysadmin at the Computer Aided Engineering Center

- Learned best practices for maintaining over 200 Debian virtual machines and servers for 11,000 engineering students and faculty members
- Gained experience working with a large legacy codebase of highly interconnected scripts (Perl, Bash) and dynamic system configurations (CFEngine, Icinga, FAI)
- Achieved a high level of proficiency working in a Unix shell environment
- Wrote scripts using VMWare's vSphere SDK for Perl to dynamically generate suggested pool settings based on current hardware available and VMs running.

Camp Counselor Summer 2013

Counselor at ICE (Institute for Chemical Education) Summer Chemistry Camps

- Effectively communicated abstract chemistry concepts to kids by using concrete examples

PROJECTS

UW Augmented Reality Tour - jglukasik.com/projects/uw-ar-tour

Developed a Google Glass app, "UW-Madison Augmented Reality Tour." Set up a Postgres database with PostGIS extension populated with OpenStreetMaps data that a small Python server connects with to run spatial queries on Madison buildings and craft JSON responses to GPS coordinates

Online Remote - jglukasik.com/projects/remote

Bootstrap website sends actions to a Perl script, which translates actions to button presses, sends button codes to WiFi-connected microcontroller, that flashes an infrared LED to control the TV

Snapchat Timelapse - jglukasik.com/projects/snaps

Takes pictures each minute of Madison's capitol building, and stitches them together nightly to make daily timelapses that are posted as a Snapchat story

CAMPUS INVOLVEMENT

Crestwood Scratch Club September 2014-Present

Along with 3 other students, led an afterschool program that taught 4th and 5th graders how to code with Scratch, an introductory programming language designed by MIT.

Mathematical Contest in Modeling February 2014, 2015

Researched, modeled, and wrote a paper on potential solutions to traffic flow problems in a team of three over the course of one weekend

Student Participants in Chemical Education Fall 2012-Spring 2014

Performed chemistry demonstration shows and hands-on activities for K-12 students

RESEARCH

Undergraduate Researcher October 2013-July 2014

Wrote MATLAB simulations of swimming microorganisms to study long term dynamics of symmetry-breaking surface interactions, with potential applications in passive sorting or entrapment. Presented at the Society for Industrial and Applied Mathematics (SIAM) Annual Meeting 2014 in Chicago, IL with our talk: "Billiard Motion of Microorganisms in Confined Domains"