

ANDREW V. ZWICKY

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WORK EXPERIENCE

John Deere

Senior Engine Controls Engineer

2017 - Present

Engine Controls Engineer

2014 - Present

- Overhauled existing code build process, refactoring many batch files into one application C#
- Lead deployment of Mercurial by creating support tools and running a weekly user's group Python
- Resolved many embedded engine controls software bugs C
- Introduced continuous integration in team by creating build-on-push branches for CI Python, Jenkins
- Designed, implemented, and tested embedded control code for new exhaust throttle C

Engine Performance Analyst

2013 - 2014

- Developed high fidelity GT-Power engine simulation models for 4.5L engines
- Assisted calibration engineers in calibrating engine throttle via simulation

Continuous Improvement Engineer

2012 - 2013

- Commonized head bolts across engine series to reduce operator tool changes
- Investigated and resolved oil pump gear failures via part updates

Cummins Engine Company, Inc.

Product Validation Engineer

2011 - 2012

- Lead a team developing a pre-chamber spark plug cup from concepts to design release
- Wrote test plan and analyzed results of temperature reduction from cooling gallery pistons

TECHNICAL SKILLS

Proficient: Python C# C Mercurial

Exposure: Jenkins Linux Latex MATLAB Simulink/Stateflow

VOLUNTEER & PROJECT EXPERIENCE

Mercurial - Open Source Contributor

2017

- Fixed issue3153: correctly handle deleted subrepositories, which was affecting department users.
- Fixed issue5479: properly count lines starting in -- or ++

reddit.com/r/dailyprogrammer - Volunteer Challenge Submitter

2017

- /r/dailyprogrammer is about challenging programmers of all skill level with weekly programming challenges
- Responsible for creating 1-2 programming challenges a month for others to solve

Junior Achievement - Volunteer Instructor

2013 - 2014

- Taught economics lessons & budgeting, volunteered for financial literacy fairs

Bartholomew Consolidated School Corporation - Minds on Math Tutor

2012

- Taught a section of 20 freshmen study skills, engineering ethics, and academic integrity

LEADERSHIP POSITIONS AT UNIVERSITY OF ILLINOIS

Engineering Council - President

2010 - 2011

- Collaborated with College administration on issues affecting 70+ engineering societies

EDUCATION

University of Illinois at Urbana-Champaign

GPA: 3.56/4.0

Bachelors of Science in Mechanical Engineering with Honors

Major GPA: 3.68/4.0