ANDREW V. ZWICKY

1610 Washington, Cedar Falls, IA 50613 | 847-712-1100
andrew.zwicky@gmail.com | zwickypedia.com | github.com/andrewzwicky

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