

# Timothy Overly

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## Experience:

### Root Insurance

*Engineering*

**Columbus, Ohio**

*July 2017 – Present*

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#### Senior Engineering Manager

- Maintained insight and ensured progress of the four engineering teams deliverables that I manage.
- Coached directly and through other leaders the approximately 30 engineers in my organization.
- Implemented multiple processes that minimized redundant work, ensured critical issues were addressed, and balanced immediate and long term needs.

#### Engineering Lead

- Lead the team that implemented our in-house claims system and imported existing claims from and external vendor in a three month window.
- Oversaw the work and reviewed the code of members of my team during the weekly sprint cycles.
- Triaged bugs and maintained systems during the weekly rotations.

#### Senior Software Developer

- Implemented features across the full stack, from the Rails backend systems through to the React client side application.

### SPIDAWeb LLC

*Software Development and Analysis Engineering*

**Gahanna, Ohio**

*August 2007 – July 2017*

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#### Web Developer

- Designed and programmed multicomponent service-oriented web applications using various frameworks and design patterns.
- Wrapped external web services into common interfaces for modular designs.
- Diagnosed and tuned large datastores for sub-second response times.
- Installed and supported containerized deployments inside corporate and cloud environments.

#### Desktop Developer

- Involved in all aspects of the development of the company's primary desktop application, including design, development, and testing.
- Wrote a finite element analysis package, that accounted for geometric non-linearities, catenary wires, pre-stressed components, and temperature affects to determine loading and stresses in utility pole structures.

#### Development Manager

- Managed the team responsible for the development, maintenance and support of the company's software products.
- Served as the primary technical contact for internal design processes and external customer interactions.
- Implemented continuous integration testing, code review, and feature development cycles to support a more robust development process.

**Los Alamos National Laboratory**  
*Engineering Institute*
**Los Alamos, New Mexico**  
*May 2006 – July 2007*


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**Graduate Research Assistant**

- Designed, built, and tested small electronic devices for use in structural health monitoring applications.
- Programmed in MATLAB and C to control external hardware for data acquisition and analysis.
- Developed a sensor diagnostic algorithm for use with piezoelectric sensor/actuators and implemented it in software.

**TK Engineering**  
*Analysis Engineering*
**Cincinnati, Ohio**  
*August 2005 – April 2006*


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**Engineering Apprentice**

- Constructed both two and three dimensional finite element models of aircraft engine parts for modeling heat transfer, stress, and life.
- Automated boundary condition application through the programming of macros in ANSYS.

**Los Alamos National Laboratory**  
*Dynamics Summer School*
**Los Alamos, New Mexico**  
*June 2005 – August 2005*


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**Engineering Intern**

- Worked as part of a multi-disciplinary team to implement an algorithm that used natural frequencies to detect damage in a structure.
- Correlated test results to a theoretical model for plant identification and controller implementation.

**Robert Bosch GmbH**  
*Central Research and Development Center*
**Stuttgart, Germany**  
*April 2001 – September 2001*


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**Praktikant**

- Programmed a climate chamber measurement system using Visual Basic to improve data collection and decrease measurement time by eighty percent.
- Developed a test protocol and programmed measurement systems to qualify new magnetic anti-lock brake sensors.
- Designed and constructed fixtures for testing existing products within magnetic fields.

**Enable Medical**  
*Product Engineering*
**Cincinnati, Ohio**  
*June 1999 – August 2000*


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**Manufacturing, Research, and Development Co-op**

- Designed and constructed prototype devices for use in treating heart disease that led to a device being taken to market.
- Performed primary testing and qualification before product release for both endoscopic and open surgery devices.

**Computer Skills:**

Languages	Frameworks	Databases	Build Tools
Bash	EmberJS	MySQL	Ant
C	Grails	MongoDB	Gradle
Groovy	NodeJS	Oracle	Grunt
JavaScript	React	PostgreSQL	Ivy
Java	Ruby on Rails	Redis	Maven
Ruby	Sinatra	SQL Server	Rake

**Education:**

Other Syntaxes	Testing Frameworks	CI Systems	Deployment Tools
CSS/SCSS	Jasmine	CircleCI	Docker
HTML	JUnit	CodeCov	Google Cloud
JSON	Mokito	Jenkis	Heroku
LaTeX	Spock	Travis CI	httpd
Markdown			Tomcat
XML			NGINX
Design Concepts	Operating Systems	Protocols	Version Control
Agile/Scrum	Linux	REST	Git
IoC	OS X	SOAP	Subversion
MVC	Windows	SSL	
SOA			

**University of Cincinnati** *Department of Mechanical, Industrial and Nuclear Engineering*  
**Masters of Science in Mechanical Engineering - 2007**

- Structural Dynamics
- Advanced Vibrations
- Finite Element Techniques

**University of Cincinnati** *Department of Mechanical, Industrial and Nuclear Engineering*  
**Bachelor of Science in Mechanical Engineering - 2002**

- International Engineering Certificate

### Open Source:

- [Resume](#) (author) the code that was used to generate this document
- [Truck Circuit](#) (author) an arduino project with matching circuit diagram for a halloween costume
- [SmartThings](#) (author) device handler to control a whole house fan
- [Dot Files](#) (author) series of scripts to make configuring a computer quick and consistent
- [SHM Tools](#) (contributor) a package of engineering tools used in structural health monitoring