# **Timothy Shepston Overly**

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# **Experience:**

Empora TitleColumbus, OhioEngineeringAug 2021 – Present

# Director of Engineering

- Architected and directly developed product features using Ruby on Rails and EmberJS.
- Evolved a minimal viable product from launch to a reliably maintained and deployed application.
- Made and implemented key decisions to migrate backend systems to increase developer productivity.
- Implemented core team processes including interviews, retros, code reviews, standups, and showcases.

**Root Insurance**Engineering
July 2017 – Aug 2021

# Senior Engineering Manager

- Maintained insight and ensured the progress of four engineering teams' deliverables.
- Coached directly and through other leaders the 25+ engineers in my organization.
- Implemented multiple processes that minimized redundant work, ensured critical issues were addressed, and balanced immediate and long-term needs.
- Set the technical direction and vetted overall architecture improvements within my functional group.

#### **Engineering Lead**

- Lead the team that implemented our in-house claims system and imported existing claims from an 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 Ruby on Rails backend through to the React client-side application.

SPIDAWeb LLC Gahanna, Ohio

Software Development and Analysis Engineering

*August* 2007 – *July* 2017

#### 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 effects to determine loading and stresses in
utility pole structures.

# Head of Software Development

- 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

Los Alamos, New Mexico

Engineering Institute

*May* 2006 – *July* 2007

#### 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**

Cincinnati, Ohio

Analysis Engineering

August 2005 – April 2006

# **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

Los Alamos, New Mexico

Dynamics Summer School

*June* 2005 – *August* 2005

#### **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**

Stuttgart, Germany

Central Research and Development Center

*April* 2001 – *September* 2001

#### 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 antilock brake sensors.
- Designed and constructed fixtures for testing existing products within magnetic fields.

#### **Enable Medical**

Cincinnati, Ohio

Product Engineering

*June* 1999 – *August* 2000

# 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:**

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# **Education:**

**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