912 E 49th St Ryan James McGill (832) 683-9212 Austin, TX 78751 ryanjamesmcgill@gmail.com

#### **EXPERIENCE**

#### Full Stack Web Developer YourTime June 2016 - Present

 Building and designing the company's website and product application. System is built using modern web technologies such as React, Redux, Webpack, and Node. Source available at: https://github.com/ryanjamesmcgill/yourtime

#### **Cleans Process Engineer**

# **Samsung Austin Semiconductor**

June 2013 - April 2016

- 14nm Oxide Bridge Reduction Team: Cleans representative for defect reduction team. Received Samsung DRIVE Award.
  - Developed a monitoring dashboard that scored the performance of 250+ processing chambers by z-scoring all foundry data into a single metric which allowed for fast and accurate identification of failing equipment.
- Cleans Spotfire Administrator: Certified Spotfire and Oracle SQL administrator for the Cleans department.
  - Provided one-on-one training to fellow engineers on how to operate and develop Spotfire dashboards.
  - Setup the department's first dedicated server to aggregate fab data to support the Spotfire reports.
- **Tools Developer:** Developed customized web apps and excel macros for fab engineering teams which have reached a usage rate of 12,000+ queries per quarter. Obtained and configured the department's first web server.
- **2015 Idea Fair for Tip Table Visualizer:** Selected by the Innovation department to present a data visualization program that enabled users to quickly picture the status of the fab equipment through an Excel based interface. By implementing a dynamic pivot table based view, users could see 60x more rows per page than the previous system.

Lead Instructor iD Tech Camps June 2011 - August 2012

- Lead instructor of a summer tech camp for students of ages 7-17. Mentored a team of 4-6 instructors to run weekly classes for subjects spanning C++/Java programming, 3D modeling, photography, web mastering, and video game design.
- Developed lesson plans, edited camp videos, and organized a weekly graduation ceremony.

# Audio Engineer, Technician

# **Big Orange Recording Studio**

September 2011 - May 2013

- Engineer at a fully analog music recording studio. Projects varied between recording sessions for clients and technician work to maintain 50+ year old vintage equipment such as tape recorders, mixing consoles, and electric organs.
- Mastered audio recordings for the website Daytrotter that published to a national audience of 70,000+ listeners.

#### **EDUCATION**

# B.S.E.E. Bachelor of Science in Electrical and Computer Engineering

#### The University of Texas at Austin

June 2009 - May 2013

- **UT ECE 2013 Senior Design Competition:** Awarded 2nd place for a Bicycle Collision Avoidance System. A pedal powered embedded linux system that used computer vision to detect pedestrians.
- Texas Instruments 2012 Outstanding Student Designer: Awarded 4th place for design of a high-gain operational amplifier.
- Kerrville 2010 Singer Songwriter Contest: Awarded 1st place and an opportunity to play at Kerrville Folk Festival.

#### **DESIGN PROJECTS & CODING EXAMPLES**

- YourTime Web App (2016) MongoDb, Express, React, Node based application currently in development for a new startup called YourTime. React, Redux, Express [https://github.com/ryanjamesmcgill/yourtime]
- Worklist Generator (2015) ReactJS based web app that provides an alternative query builder for Samsung semiconductor software. Javascript, HTML, CSS [github.com/ryanjamesmcgill/worklist-generator]
- **Web Audio Organ** (2015) Interactive Javascript web app that uses Web Audio/Midi APIs to emulate a 1960's analog organ. *Javascript, HTML, CSS* [github.com/ryanjamesmcgill/webaudio-organ]
- Embedded Linux Audio Sampler (2014) An embedded linux system that plays back audio samples for musical performance, presented at the 2015 JUCE summit in London. C++ [github.com/ryanjamesmcgill/Audio-Sampler-Selector]

# LANGUAGES & TECHNOLOGIES

- Languages: Javascript, Node.js, Python, C++, Visual Basic, SQL, HTML, CSS
- Technologies: React, Express, Redux, Docker, Heroku, MongoDb, Oracle SQL Developer, Git, Microsoft Excel

### **COMMUNITY & VOLUNTEER**

• Samsung Austin Semiconductor High School Mentorship Program (2013-2014)