# Johnathan R Germick

#### **Permanent Address**

#### **Education**

Iowa State University of Science and Technology (Ames, IA) 2014 – 12/18/2018

Major: B.S. Electrical Engineering GPA: 3.8

## **Experience**

#### US Patent Office Patent Examiner

(October 2020 – Present)

Examine Artificial Intelligence patents (Art Unit 2100) while considering both legal and technical requirements. Requiring strong grasp of AI as well as the ability to communicate effectively to practitioners with a range of technical understanding.

## IBM Signal Integrity Engineer

(January 2019 – October 2020)

Designed and wrote automated testing scripts in python in order to test performance of circuit boards. This included automated communication with VNAs, Oscilloscopes, power supplies, and other hardware. Further, compared the experimental performance to simulated performance using computer simulation tools and EM solvers (HFSS, SPICE, and Power DC).

Regular collaboration with team to diagnose bugs while keeping in mind electromagnetic and transmission line theory, general I/O design, signal integrity, differential and single-ended interface technologies.

#### **University of Minnesota**

#### Undergraduate research

(June 2018 – August 2018)

Designed and wrote MATLAB scripts based on the latest research in fMRI field. This involved designing experiments to be run during MRI scans, as well as implementing mathematical algorithms to preprocess and analyze collected MRI data.

#### **Iowa State University**

#### **Undergraduate research**

(June 2017 – November 2018)

Used Finite Element Software (SIM4LIFE) to investigate efficacy of trans-cranial magnetic stimulation designs on 3d models of human heads. Published paper in IEEE transactions on Magnetics: "Development of Focused Transcranial Magnetic Stimulation Coils for Treating Schizophrenia" (2018)

### **International Paper**

### **Reliability Engineer Internship**

(August 2016 – December 2016)

Communicated with technicians to better organize and catalog work procedures with SAP.

### **Rochester Institute of Technology**

### **Undergraduate research**

(June 2016 – August 2016)

Applied image processing methods to musical analysis and transcription (Matlab).

#### Skills

- Programming & Technologies: Python, Matlab, VBA, HTML/CSS/Javascript, Markdown, Linux, Docker, Computer Networking
- Able to quickly understand, read and respond to written technical documentation.

# References are available upon request.