# Eric Hemphill

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# **EDUCATION**

#### **OHIO STATE UNIVERSITY**

MAJOR IN COMPUTER SCIENCE FOCUS IN MACHINE LEARNING MINOR IN STATISTICS Expected May 2018 | GPA: 3.41

## COURSEWORK

#### **IN PROGRESS**

Introduction to Data Mining Operating Systems Laboratory Data Analytics I Knowledge Systems Capstone

#### PLANNED (SP18)

Data Analytics II Intro to Parallel Programming Compiler Design Foundations of Speech & Language Processing Machine Learning

Advanced Artificial Intelligence

#### COMPLETED

Computer Networking
Principles of Programming
Languages
Automata & Formal Languages
Intro to Mathematical Statistics I & II
Interactive Systems Project
Intro to Database Systems
Intro to Artificial Intelligence
Systems: Operating Systems
Systems: Computer Organization
Foundations of Higher Mathematics
Data Structures & Algorithms
Intro to Electrical Engineering I & II

# SKILLS

#### **PROGRAMMING**

Language:

- Java C# Python Typescript
- C C++ Javascript

#### **Technologies**

- Spring Angular .NET
- .NET Core Android Git Unix

# **EXPERIENCE**

### 84.51° (KROGER/RALPHS) SOFTWARE DEVELOPMENT INTERN

May 2017-August 2017 | Cincinnati, OH

- Developed an open sourced interview platform, CoDE (Collaborative Development Environment), used to interview developer candidates in real time
- Utilized Spring framework to create a REST API microservice to support CoDE's frontend and allow room for extension in future additions
- Utilized JUnit testing framework to thoroughly test Spring backend in an agile environment
- Created and tested material frontend for both interviewer and candidate using Angular and PhantomJS

#### FIDELITY INVESTMENTS SOFTWARE ENGINEERING INTERN

May 2016-August 2016 | Durham, NC

- Utilized Domain Driven Design to develop a cloud-ready ASP.NET Core web application to monitor production server endpoints
- Created Visual Studio extension in C# that streamlined the process of managing XML based messages

#### **SCHAEFFLER GROUP USA** SOFTWARE ENGINEERING INTERN

May 2015-August 2015 | Wooster, OH

- Designed ASP.NET MVC web application to track and produce reports for part profit margins over a production cycle
- Streamlined the process of margin report meetings by generating clean, easy to read margin reports on the fly

#### PRO JECTS

#### VISUAL NBA PLAYER TRACKING

84.51 Hackathon (Won Limitless Minds Challenge) | August 2017

- Utilized OpenCV libraries to track NBA players in NBA broadcast footage
- Developed Python scripts to find court lines, identify people inside the court, and track them frame to frame

# **AUTOMATIC MUSIC TRANSCRIPTION** AI II SEMESTER PROJECT Spring 2017

- Used Tensorflow libraries to train model that automatically transcribes piano music from waveform data to MIDI format
- Created Python scripts to perform Fourier transforms on 40ms segments of songs to train against corresponding MIDI data
- Developed Python scripts to convert MIDI files to and from csv to make easily digestible data for training

# REBUGGER www.github.com/sadcyclops/RebuggerCS

MHacks 8 | October 2016

- Created Online 32 bit MIPS assembly emulator and debugger that supports all integer based instructions and data sections
- Designed Angular JS frontend for writing and dynamic debugging of MIPS code