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## **FDUCATION**

# UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN

#### **BS-MCS IN COMPUTER SCIENCE**

Aug 2015 - May 2019 | U-C, IL Conc. in Big Data and Intelligence College of Engineering Dean's List James Scholar Cum. GPA: 3.86 / 4.0

#### **BARRINGTON HIGH SCHOOL**

Grad. May 2015 | Barrington, IL

# LINKS

Github: dillondavis LinkedIn: dillon-davis

# **COURSEWORK**

#### **FUNDAMENTALS**

Introduction to Computer Science
Discrete Structures
Data Structures
Systems Programming
Applied Linear Algebra
Numerical Methods
Algorithms and Models of Computation

#### **ADVANCED**

Database Systems Introduction to Data Mining Advanced Data Science Applied Machine Learning Artificial Intelligence (FA17)

# **SKILLS**

#### **PROGRAMMING**

Over 5000 lines: Java • Python Over 1000 lines:

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Familiar:

Javascript • MySQL • iOS • Clojure • HTML/CSS • R

#### **DEVOPS/TECH**

UNIX/Bash • Git • SVN • AWS S3, Elastic MapReduce, Elastic Beanstalk, and Route53 • Jupyter Notebook • NumPy/Pandas • Tensorflow • Flask • Cascading • MongoDB • PostGres • Redis • MariaDB • Hadoop

# **EXPERIENCE**

### **RESEARCH** UNDERGRADUATE RESEARCHER | COMPUTER VISION

Sep 2017 - Present | Urbana-Champaign, IL | Professor Svetlana Lazebnik

- Working on improving object visibility classifier by mixing THOR environment imagery and real imagery with a PyTorch deep learning architecture
- Will be used in Allen Institute guery-based task robot research

#### **UBER** SOFTWARE ENGINEER INTERN | MAPS DATA

May 2017 - Aug 2017 | Palo Alto, CA

- Designed and implemented a Named Entity Recognition system for US, Mexico, and Canada address parsing using big data and sequence based machine learning techniques and received a return offer.
- Built a data pipeline to extract necessary data and build massive, robust training datasets for my models with custom features using Java's Cascading framework on AWS ElasticMapReduce
- Built Conditional Random Field models using CRFSuite with custom feature engineering to achieve full address accuracies of 93-96% on heldout data.
- Built a custom experimental Tensorflow deep learning model based on a Carnegie Mellon paper achieving state of the art full address accuracies of 98.3-99.1% on heldout data

#### **CLIQ** SOFTWARE DEVELOPER INTERN | FULL STACK

May 2016 - Aug 2016 | Chicago, IL

- Worked on new features such as intelligently suggesting friends to invite to Cliq and user analytics tools under the CTO using Flask, Mongo, and Redis.
- Developed an experimental web app for the Cliq mobile app that aggregated top events for users' areas and later ported it to Swift/iOS.
- Created, prototyped, and tested a new feature to incorporate my events feed with our group-to-group meetup platform in an all company sprint.

## **PROJECTS**

#### WIKIPEDIA VANDALISM DETECTION

- Research project to detect fraudulent or vandalistic revisions on Wikipedia
- Built a Logistic Regression model with 90% accuracy and helped train and improve a Random Forest to achieve 95% accuracy and 98% recall.

#### PICO CLASSIFICATION LIBRARY

• Implementation of classification algos such as Decision Trees and Random Forest in Python and Naïve Bayes and a basic Neural Network in Clojure

#### **VIRTUAL VOYAGER**

- Web Application that creates a trip for users based off any query such as 'tropical' or 'rock climbing' and recommends trips based on history
- Built using Flask, MariaDB and HTML/CSS/JS with classmates using Wikipedia data, Google Maps, and Viator

# **PIGGY BANK (BOILERMAKE 2017 TOP 10)**

- An augmented reality game to set and reinforce good habits by placing custom tokens at the gym or class to check in every day. If a weekly goal isn't met, a set amount is donated to a charity of your choice.
- Built backend with teammate using Node.js, Express.js, and Mongoose.js assisted building web frontend.