# **RUPALI KOTINA**

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### **EDUCATION**

Bachelor of Computer Science, State University of New York, University at Buffalo

August 2017 - May 2019

Relevant coursework: Data Structures, Discrete Structures, Introduction to Machine Learning, Operating Systems, Software Engineering, Introduction to Programming Languages, Design and Analysis of Algorithms

#### **HONORS**

Dean's List Member, Tau Sigma Honor Society Spring 2018

January 2018 - Present

# **WORK EXPERIENCE**

### **Teaching Assistant for CSE 250 Data Structures**

August 2018 – May 2019

University at Buffalo

Buffalo NY, USA

- Worked under Prof. Andrew Hughes and in implementing data structures
- Content Covered: Stacks, Queues, Linked Lists, Recursive Algorithms, Trees, Binary Trees, AVL Trees, Huffman Coding,
  Searching and Sorting
- Supervised student examinations and graded them based on devised rubrics

Research Aide

February 2018 - May 2019

Buffalo NY, USA

- Food Systems Planning and Healthy Communities Lab
  Translated / Transcribed audio files using Audacity
  - Analyzed and visualized data generated by the transcriptions using NVivo version 10 and MSExcel
  - Researched policies to strengthen food systems

**Creative Design Intern** 

May 2017 – August 2017

Bangalore, India

- Team 4 Progress Technologies LLC
  - Observed design techniques and tools: web layouts
  - Reviewed code and assessed the impact of submitted changes
  - Designed Web layouts and Modern Resume layouts

### **Engineering Intern**

May 2016 – June 2016

Sunnabeda, India

Hindustan Aeronautics Limited

- Researched on techniques to improve the user interface JApplet
- Incorporated the use of Test Driven Development and Agile Methodology of Software Development to ensure proper functioning of the JApplet
- Led effectively with a team of 4 members with skills in engineering and design

### **PRESENTATIONS**

Kotina, R., Leon, D., Sweeny, E., Mui, Y., & Raja, S. 2019. "Organic Farming Opportunities: Quality over Quantity." 15<sup>th</sup> Annual Celebration of Center for Undergraduate Research and Creative Activities, University at Buffalo, State University of New York. Buffalo, NY, April 25, 2019.

# **SKILLS**

**Tools:** NetBeans; CLion; PyCharm; Rational Rose; NVivo **Database Management:** MySQL; Oracle; MS Access **Research and Planning:** Identifying problems; gathering information; developing evaluations; calculating results

**Coding languages:** JavaScript; Python; C; C++; HTML; CSS; SML;

OCaml; Java; PHP

**Soft Skills:** Strong communication; teamwork; interpersonal;

cultural competency; and organizational skills

Operating Systems: Windows (98, XP, 10); Mac OS X; Linux

# **PROJECTS**

# Naïve Bayes Classifier (Using Python)

Linguistic Skills: English; Hindi; Oriya; Telugu

Implemented and evaluated a Naive Bayes Classifier that uses priors on the target class variable as well as individual features. Assignment focused on how the classifier gets impacted by underlying bias in data.

### **Linear Models for Supervised Learning (Using Python)**

Implemented three different classifiers using python: perceptron, logistic regression and support vector machines. Assignment focused on finding the most accurate classifier among the three.

# **Multilayer Perceptron (Using Python)**

Implemented and evaluated a multilayer perceptron for classifying handwritten digits. This project uses TensorFlow Library to deploy neural networks.

# Web Portfolio (Using JavaScript, PHP, HTML, CSS)

Designed a personal, interactive website showcasing my resume, blogs and projects. This is a work-in-progress.

### Poker Game (Using Java)

Designed a game called Poker Game for one player to learn the basic rules of hands in poker (the rules are different than the traditional game of poker).