

# GIRIDARA VARMA ELUMALAI

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## SUMMARY

A good team player and a well-rounded graduate student with keen problem-solving and analytical skills, looking for internship/full-time opportunities in the field of Software Development and Machine Learning.

## EDUCATION

**University of Texas**, Dallas

*Aug 2015 – May 2017 (Expected)*

Master of Science in Computer Science (Intelligent Systems)

*GPA – 4.0/4.0*

**Madras Institute of Technology - Anna University**, Chennai

*Aug 2007 – Apr 2011*

Bachelor of Technology in Information Technology

*CGPA – 7.96/10.0*

## RESEARCH EXPERIENCE

**Graduate Research Volunteer**

*Jan 2016 – Present*

- Working on applying Q-learning/Reinforcement learning using Artificial Neural Networks to make decisions in a Communication Network
- Designing Neural Networks to approximate a Q-function/Reward function whose state-space is exponential in the size of the state variables and cannot be stored in a simple look-up table

## ACADEMIC PROJECTS

**PacMan AutoPlayer**

- Implemented auto-play in a PacMan game using various Artificial Intelligence and Machine Learning based algorithms like A\* search and Hidden Markov Model in Python

**2048 Game Solver**

- Worked on a Machine Learning based solver for the famous 2048 board game using Naive Bayes and Bayesian Networks with structure learned from Chow-Liu Trees in Java and Selenium

**Classification & Clustering**

- Spam email classification using Support Vector Machines and Gaussian Kernels, Mushroom edibility classification using Decision Trees in Matlab, and Spectral clustering of foreground and background pixels in an image using k-Means Clustering in Matlab.

## PROFESSIONAL EXPERIENCE

**Software Development Engineer - Test**, Amazon, Chennai

*Feb 2013 – Sep 2014*

- Designed an Automation framework for testing Android applications by simulating user-like events
- Worked on a Test framework for the web services of Kindle Document Delivery System

**Quality Assurance Technician**, Amazon, Chennai

*Aug 2011 – Jan 2013*

- Developed an Android application to capture the processor, memory, network and power usage of other foreground applications

## RELEVANT COURSES

Machine Learning, Probabilistic Graphical Models, Multi-core Programming

## TECHNICAL SKILLS

Java, Python, Matlab

## AVAILABILITY

Spring (Jan – May '17), Summer (May – Aug '17)

## VISA STATUS

F1 (Student)