

# Stephen Gung

<https://github.com/Epifany>

[stephen.gung.ny@gmail.com](mailto:stephen.gung.ny@gmail.com)

914-589-7786

3842 E Windsong Dr, Pheonix, Arizona, 85048

---

## Education

**University at Buffalo** - M.S. Computer Science

*December 2015*

Machine Learning, Data Analytics, Statistical Inference, Bayesian Networks

**Stony Brook University** - B.S. Computer Science

*May 2013*

## Experience

**Teaching Assistant** (February 2013 – May 2013)

Aided undergraduate students with understanding of code, homework, project, and topics (including data structures, algorithms, and Java Swing) relating to the courses. Homework coded in Java, C, and MIPS. Project coded in Java.

## Projects

**Chronic Kidney Disease patients**

*December 2015*

- Developed a K-means clustering algorithm to allow analysis of disease progression from patients.

**Learning & Inferencing with PGMs**

*May 2015*

- Developed a Bayesian Network algorithm to help benefit forensic analysis of handwriting, developing a Gibbs Sampling algorithm for evaluating mean and entropy inferences.

**Semantic Labeling of Images**

*December 2014*

- Used Support Vector Machine classifier to understand the relation between computational complexity vs accuracy of image feature extraction.

**Face Recognition & Detection**

*May 2014*

- Implemented and compared the misclassification rates between Eigenface & Fisherface dimension reduction algorithms, applying Nearest Neighbor method for classification results.

**Routing Protocols**

*December 2013*

- Used PuTTY (SSH client), and C++ to implement Distance Vector Protocol, replacing count-to-infinity solution with poison reverse, to understand packet exchange under User Datagram Protocol (UDP).

**Distributed File Sharing System**

*December 2013*

- Used PuTTY, and C to create a simulated distributed file sharing system to understand packet exchange under Transmission Control Protocol (TCP).

**Leyline 5**

*May 2012*

- Used C++, Lua, and Visual Studio to create a top-down PC shooter where the player's objective, controlling a small spaceship, is to accumulate points via eliminating swarms of AI bots.

**Hotel Management System**

*December 2011*

- Used Java and Swing to design and develop a management system application. Hierarchical users (managers, employees, and guests) have varying interacting capabilities.

**CIA Factbook Mapper**

*May 2011*

- Used Java and Swing to design and develop CIA World Fact book application that renders world countries. Users are given functions for displaying various statistics including population, average budget, etc.

## Self-Projects

**Pokémon IV Breeding Probability Calculator (Gen-VI)**

*December 2016*

- Developed a specialized combinations algorithm, and a specialized probability algorithm to understand the probabilistic chance (based on user-specified input) of obtaining offspring Pokémon with sets of perfect IVs.

## Skills

Java, C/C++, Matlab, HTML, CSS, JavaScript, JSP, XML, GIT