Dimuth M. Kulasinghe

121 W Campus Dr • Stanford, CA 94305 • (480)-241-7812 • dimuthk@stanford.edu

Education

M.S. in Computer Science, June 2014

Stanford University

B.S. in Computer Engineering, May 2012

University of Arizona

Experience

Google Software Engineer

June 2014+

- Integration of Youtube ads into mobile platforms

NASA Space Grant Intern Advisor

Fall 2011-2012

- Continued work on SMS gateway application
- Developed survey applications for use in monitoring EKG patients
- Supported incoming interns, scheduled meetings with prominent NASA members

American Express Intern

Summer 2011

- Ran installations for new ETL transactions in Business Intelligence group
- Designed test cases for sample database and data integration system

NASA Space Grant Intern

Fall 2010-2011

- Developed SMS gateway application for use in communicating with clients

Phoenix Suns Ball-boy

2007-2008

- Performed general pre-game preparatory activies

Honors

- National Science Foundation Fellow 2012
- National Merit Scholar 2008
- Intel Scholarship for Employee's Children 2010
- IEEE-Eta Kappa Nu, Honors Society for Electrical and Computer Engineers

Github Link

https://github.com/dimuthk/Dimuth_Projects/tree/master

Software Projects

Spatial Representations of Harmonic Structures

/hmm.pdf

- HMM classification, Markov Decision Processes

Compare the effectiveness of the Hidden Markov Model in generating harmonisations for vocal and instrumental melodies.

Harmonisation using Hidden Markov Models

/lyrics.pdf

- HMM classification, Markov Decision Processes

Compare the effectiveness of the Hidden Markov Model in generating harmonisations for vocal and instrumental melodies.

Chord Prediction Using Lyric Sentiments

/lyrics.pdf

- Naive Bayes, SVM classification

Construct chord progressions to accompany a given set of lyrics.

Document Wikifier

/wikifier.pdf

- Big data (45 GB), Linear regression, Feature selection

Entity tagger which identifies key phrases in a document, and hyperlinks these phrases to their associated Wikipedia pages.

Twitter Information Catalysts

/twitter.pdf

- Big data (100 GB), Graph attributes (PageRank, Betweenness Centrality)

Identify information propagaters in a Twitter network.

Pokemon Card Game Application

/PokemonGame

- GUI, HCI elements (drag/drop/click, etc), OOP design

A software adaptation of the classical Pokemon trading card game.

Raytheon Surveying Application

/QuiPST

- Client-server development

Surveyor application. Developed client side using Android, and server side using Django framework.

SMS Messaging Standalone Application

/FarmFox

- Android application

Android application allowing use of smartphone as a group SMS coordinator.

EKG Surveyor Application

/Alerter

- Android application, client-server interaction

Phone application allowing surveying of EKG patients on periodic intervals.

SMS Messaging Gateway Application

/bluefox

- Android application, Drupal (server) interaction

Phone application that allows smart phones to be used as gateways for SMS communication between servers and clients