# Abhinav Mukund Kulkarni 3801 16C, Parkview Lane, Irvine, CA, 92612, United States; 512 658 7456; abhinavkulkarni@gmail.com; WWW

## Abhinav Mukund Kulkarni

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EDUCATION University of California, Irvine

2011 - 2013 (Expected)

Master of Science, Computer Science, 3.77/4.0

National Institute of Technology, Tiruchirapally, India

2005 - 2009

Bachelor of Science, Computer Science, 8.34/10.0

GRADUATE COURSEWORK Machine Learning Statistical Computing Bayesian Statistics Data Structures Probabilistic Learning
Intermediate Statistics I & II
Information Retrieval
Computer Architecture

Probabilistic Graphical Models Statistical Methodology I & II Principles of Data Management

RESEARCH

Master's Thesis: Board Evaluation Strategies for the Game of Go

UC Irvine

WORK Advisor: Prof. Alexander Ihler

April 2012 – Current

• Modeling Go board using grid-based Graphical Models

• Designing efficient board evaluation and territory prediction algorithms using local patterns and couplings between adjacent stones

#### **Analysis of Open Source Java Projects**

**UC** Irvine

Graduate Student Researcher, Prof. Crista Lopes's Research Grant

https://github.com/abhinavkulkarni/topic-modeling

June - December 2012

- Topic modeling (LDA) of open-source Java projects to identify cross-cutting concerns
- Characterization of development curve of projects in terms of complexity of projects measured by amount of cross-cutting between concerns

WORK

Microsoft Corporation, Search Technology Center

Hyderabad, India

EXPERIENCE Software Developement Engineer

October 2009 – August 2011

- Improved relevance of search queries in specific segments by mining user click patterns from Internet Explorer and Microsoft Toolbar logs
- Incorporated offline-computed geospecific popularity of websites in search engine ranking model
- Contributed to improving relevance of location queries by mining data from location sites

PROJECT WORK

#### **Chemistry Publication Corpus Analysis**

Winter 2012, UC Irvine

- Worked on the hypothesis that Chemistry is more closed in terms of collaboration among researchers than other Physical Sciences such as Physics and Mathematics
- Analysed the graph of publication authors from reputed journals induced by coauthorship and affiliations and contrasted Chemistry with other Physical Sciences

### Heritage Provider Network Health Prize

Fall 2011, UC Irvine

- Participated in HHP Prize competition hosted by Kaggle, a predictive modeling and analytics platform
- Implemented machine learning algorithms to identify potential patients to be admitted to a hospital within next year using historical claims, drug and lab data

TEACHING

**Teaching Assistant** 

Winter 2013, UC Irvine

EXPERIENCE

- Conducted lab sessions for Python programming course
- Assisted students in projects in User Interaction Software course

SKILLS L

**AWARDS** 

Languages: C, C++, Java (Intermediate), R, MATLAB

Packages/Tools: Eclipse, Visual Studio

Technologies: Apache Hadoop (Intermediate)

LEADERSHIP Marketing Head for Fine Arts Society of NIT Tiruchirapalli.

Event Manager for CSurf '09, the online programming contest conducted in Vortex '09, the annual departmental symposium of CSE department of NIT Tiruchirapalli.

Team mentioned in the special meritorious list of ACM ICPC 2008, South Asia Region.

EXTRA Winner of gold medal in swimming contests held in sports events of NIT Tiruchirapalli. CURRICULAR Community service through National Service Scheme (NSS) involving forestation.