# Swarun Krishnamoorthy

## M.S (Computer Science) Graduate Student

Contact #3801 Parkview Lane

 $+1\ 650-619-4722$ 

swarunk@uci.edu

Apt 11-D, Irvine California 92612

http://swarunkrishna.github.io/

EDUCATION

Information

### Master's of Computer Science

Sep 2015-Jan 2017

University of California, Irvine

• CGPA: 3.63/4

• Coursework: Algorithm Design, Machine Learning, Information Retrieval

Dual Degree Masters (B.Tech + M.Tech) in Electrical Engineering

2009 - 2014 Chennai, India

SKILLS

**Programming Languages**: Python, C++, C, Bash, Java, SQL, HTML, R **Softwares/Libraries**: NumPy, Pandas, MongoDB, OpenCV, MATLAB

Professional Experience

### Software Engineer Intern, Google, Mountain View

Jun 2016-Sep 2016

Team: Auction Signals (AdWords)

Indian Institute of Technology, Madras

- Worked on building a Nano-from-Macro (NfM) model for computing the long-term monetary impacts of ads blindness induced by a single ad impression.
- Worked on porting the entire NfM data analysis pipeline from R to Python (model is currently in production and will be live-tested on a sample of public users over the next 6 months)

### Software Engineer, AOL Adap.TV, Hyderabad

Jul 2014-Aug 2015

Team: Forecasting & Optimization

- Winner, AOL Adap.TV Hackathon 2014 Wrote an application that enables content publishers to add third-party real-time bid optimization engines.
- Implemented a forecasting algorithm for predicting website quality and advertisement viewability on third party websites based on historical viewability info.

Research Internship, Concept Labs, IIT Madras Research Park, Chennai May-Jul 2011-12

• Concepted and implemented a full-body gesture recognition library with multi-finger tracking using the Nintendo Wii and Microsoft Xbox Kinect

#### Internship - Gaana.com, Times Internet Ltd, Delhi

May-Jul 2013

- Prototyped a web-application that streams music off a user's various cloud-file service accounts like Dropbox, Skydrive, Google Drive.
- $\bullet$  Worked with the Gaana.com UX/UI team in designing the Gaana 3.0 iOS and Android apps, which have had close to 50 million installations  $^\dagger$

ACADEMIC PROJECTS

#### Page-Rank Based Textual Search Engine

UC Irvine, Jan-Mar 2016

• Crawled the UCI Computer Science website and implemented a PageRank based textual search engine on a 34000 size document set. (NDCG score = 0.53)

## Vectorization Methods in Standard Loops

UC Irvine, Mar-Jun 2016

• Discovered the appropriate vectorization techniques to vectorize over 120 loops from Doom 3D's source code achieving an average **speedup of 165 percent** on the loop set.

#### **Revision Detection in Engineering Documents**

IIT Madras, Chennai

With Dr AN Rajagopalan (in coordination with Caterpillar Inc.)

July 2013 - July 2014

- Proposed a new algorithm to segment an engineering drawing into sub-drawings/views
- Developed an algorithm to find differences in draft dimensions between two engineering drawings while accounting for variations in scale, position and orientation.

SCHOLASTIC ACHIEVEMENTS

Secured an All India Rank of 542 (from over 400,000 candidates) in the Joint Entrance Exam for admission to the Indian Institutes of Technology (IIT-JEE 2009).

Represented Team India at the South East Asian Regional Computer Confederation International Schools Software Programming Contest 2008 (SEARCC ISSPC 2008)

Winner, ACM Online Programming Contest at HackUCI 2015, UCI's annual Hackathon

<sup>†</sup> https://play.google.com/store/apps/details?id=com.gaana