# Sandeep Subramanian

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## **OBJECTIVE**

To obtain a summer internship utilizing my skills in Machine Learning and Natural Language Processing.

#### **EDUCATION**

Carnegie Mellon University (CMU) Pittsburgh, PA

Master's in Language Technologies

August 2016 (Expected)

Vellore Institute of Technology (VIT) Vellore, India

Bachelor of Technology (B.Tech) in Computer Science and Engineering (8.75/10) Thesis: "A Novel Computational Framework for Extreme Weather Alerts"

May 2014

PROFESSIONAL EXPERIENCE

Carnegie Mellon University, Language Technologies Institute

Graduate Research Assistant

August 2014 – Present

**Advisor:** Madhavi Ganapathiraju. Quantifying genetic similarity between diseases from Protein Interaction Networks.

Invention Labs, Indian Institute of Technology, Madras Research Park, Chennai

Language Engineer (Intern)

December 2013 – August 2014

Part of the core research and development of a language engine called "FreeSpeech" for children with Autism and learning disabilities. The engine converts language semantics into syntax.

Indian Institute of Technology, Madras, Artificial Intelligence and Database Laboratory

Research Intern May – July 2012

Worked on Sentiment Classification guided by Dr. Sutanu Chakraborti.

- Established the correlation between the occurrence of complicated linguistic constructs and incorrect sentiment classification using empirical methods.
- Developed an offline TF-IDF based search engine.

# **SELECT PUBLICATIONS**

Satyajit Ghosh, Vivek Vidyasagaran and Sandeep Subramanian Smart Cyclone Alerts over the Indian Subcontinent, Atmospheric Science Letters, Vol 15 Issue 2, (2014)

Sandeep Subramanian, Vivek Vidyasagaran and Krishna Chandramouli VIT@MediaEval 2013 Placing Task: Location Specific Tag Weighting for Language Model Based Placing of Images, Proceedings of the MediaEval 2013 Placing Task, Barcelona, Spain (2013)

Sandeep Subramanian, Vivek Vidyasagaran, Kannabiran Maheswaran, Lakshmanan K and Satyajit Ghosh Visualizing World University Rankings: A Novel Algorithm, Proceedings of the Inaugural European Conference on Education (IAFOR), Brighton, UK (2013)

# LANGUAGES, PLATFORMS AND LIBRARIES

Python C/C++ MATLAB Octave LaTeX PHP JavaScript Linux Windows Cassandra MongoDB NLTK HTML OpenCV Numpy Pygame Pyo Shell Script Scipy Sklearn SimpleCV

### **PATENTS**

Sandeep Subramanian, Vivek Vidyasagaran and Satyajit Ghosh A Novel Computational Framework for Extreme Weather Alerts. India Patent Reference Number 2290/CHE/2014

### SELECT PROJECTS

Concurrency and Deadlock Avoidance in Distributed Database Systems – Used the inherent nature of token ring network architecture to prevent deadlocks and concurrent access.

Automatic Depression Detection from Facial Expressions - Detected signs of depression in people using Active Appearance Models, Support Vector Machines and Hidden Markov Models.