# **Adarsh Alex**

1538, Highlan Ct., Fairborn, Ohio 45324 adarsh@knoesis.org • (937) 716-9252 • LinkedIn • Webpage • Github

#### **OBJECTIVE**

Seeking to leverage my experience and skills in Software Engineering to develop big data analytics and scalable applications.

#### **EDUCATION**

## Wright State University, Dayton, Ohio, USA

Master of Science (M.S.) in Computer Science

Aug 2013 – Jul 2016 (Expected)

- Research areas: Exploiting knowledge encoded in Knowledge Graphs to enhance Text Mining,
  Natural Language Processing and Applied Machine Learning
- Thesis: Detecting and Classifying Implicit Entity Mentions in Tweets
- Advisor: Dr. Amit P. Sheth
- GPA: 3.5/4.00

## Mumbai University, Mumbai, Maharashtra, India

Bachelor of Engineering (B.E.) in Computer Engineering

Aug 2009 - May 2013

#### **SKILLS**

- **Programming Languages**: Java, Python, C, C++.
- Databases: MySQL, MongoDb, Neo4j.
- Big Data Technologies: Apache Hadoop(Mapreduce), Apache Storm.
- Semantic Technologies: RDF, SPARQL, OWL.
- Web Technologies: HTML, CSS, Javascript.
- Tools and Software: NLTK, Stanford CoreNLP, Gensim, OpenNLP, Weka, word2vec, git, svn.
- Operating Systems: Linux, Windows, Mac.

#### **EXPERIENCE**

## Kno.e.sis Center, Wright State University

Graduate Research Assistant, Computer Science Department

Aug 2014 – Current

- Identifying and linking Implicit Entity Mentions in Tweets and Electronic Medical Records (EMR) using background knowledge.
- Leveraged machine learning techniques for filtering out noisy tweets in real time.

## ezDI, LLC, Ahmedabad, Gujarat, India

Research Intern

May 2014 – Aug 2014

• Explored and developed approaches for automatic knowledge acquisition from Electronic Medical Record's to enhance knowledge graphs using semantic techniques and domain knowledge.

#### **PROJECTS**

# **Detecting and Classifying Implicit Entities in Tweets**

Mar 2015 – Current

 Developed a solution that leverages background knowledge from crowd-sourced knowledge bases like Wikipedia and DBpedia to identify implicit entity mentions in unstructured text (Tweets) in real time.

### **Real Time Tweet Filtering**

Aug 2014 – Dec 2014

- Implemented an analysis pipeline engine for streaming data (Tweets) using Twitter Streaming API,
  Apache Storm and Mongo DB.
- Also developed a framework for real time noise filtering and feedback learning using Apache Storm and Weka.

**eDrugTrends** Aug 2014 – Jul 2015

 eDrugTrends is an inter-disciplinary project developed to monitor cannabis and synthetic cannabinoid use.

My Work: Developed and extended an ontology to capture all the relationships between cannabis and synthetic cannabinoids using Protege.

# **Knowledge Acquisition from EMR Documents**

May 2014 - Aug 2014

 Developed an approach for automatic knowledge acquisition from Electronic Medical Record's using Java, Virtuoso and Neo4j to enhance knowledge graph by leveraging domain knowledge and applying semantic techniques.

## **PUBLICATIONS**

- Adarsh Alex, Sujan Perera, Amit Sheth "Detecting and Classifying Implicit Entity Mentions in Tweets" *Technical Report* [Work in Progress].
- Sujan Perera, Pablo N. Mendes, Amit P. Sheth, Krishnaprasad Thirunarayan, <u>Adarsh Alex</u>, Christopher Heid, Greg Mott "Implicit Entity Recognition in Clinical Documents," *In proceedings of The Fourth Joint Conference on Lexical and Computational Semantics (\*SEM)*, Jun 2015.
- Sujan Perera, Pablo N. Mendes, <u>Adarsh Alex</u>, Amit P. Sheth, Krishnaprasad Thirunarayan "Implicit Entity Linking in Tweets," *In Extended Semantic Web Conference (ESWC)*, May 2016.