Revanth Reddy Garlapati, Ph.D.

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New York City, New York
Visa status: Eligible to work in USA

SUMMARY

Data scientist with a penchant for providing practical solutions to business problems by utilizing cutting edge data science techniques. Experienced in machine learning and Python programming. Experienced in mining large data sets using statistical software tools. Fluid understanding of design implementation and visual communication of results in D3.js. Prior to becoming a data scientist, worked in biomedical research, management engineering and healthcare consulting industries with experience in developing computational algorithms and mobile applications.

SKILLS

- Data Science: statistical modeling, design process, data wrangling, web scraping, supervised and unsupervised learning algorithms, natural language processing, communicating results via data visualization tools, git version control, optimization using linear programming techniques.
- Programming/Software: MS Office suite, Python programming, R, Data science analytical tools including: iPython notebook, Pandas, Matplotlib, ScikitIlearn, Statsmodels, Scipy, Numpy, Tweepy, NLTK, BeautifulSoup, Selenium, urllib2, CSS, HTML, D3.js, Flask, Unix Command Line, SQL, Amazon Web Services platform, MongoDB, Spark, Hive/Hadoop, QlikView.
- Languages: Fluent in English, Hindi and Telugu.

EDUCATION

The University of Western Australia, Australia — Perth, Australia
- Ph.D. in Biomedical Engineering. Result: Graduated with Distinction — 01/2011-01/2015

Massachusetts Institute of Technology (MIT) — Cambridge, MA, USA
- S.M. in Computation for Design and Optimization. GPA: 4.8/5.0 — 09/2005-08/2006

Indian Institute of Technology (IIT) — Roorkee, India
- B.S. in Civil Engineering. GPA: 7.41/10 (top 10%) — 08/2001-06/2005

WORK EXPERIENCE

Metis — New York City, USA
Data Scientist — 04/2015-present

- Applied python to analyze MTA subway data and identify traffic patterns over time in New York City subway system.
- Built a linear regression model in Python to predict gross movie revenue using the Statsmodels statistics toolbox and BeautifulSoup/urllib2 web scraping modules.
- Analyzed and optimized features for predicting heart disease using machine learning algorithms. Created visualization of analysis using D3.js.
- Carried out Natural Language Processing of twitter data relevant to Apple watch in order to assess consumer sentiment associated with the product.
- Created a Business Intelligence tool for summarizing critical information from reviews of Samsung's electronic products retailed on Amazon.com.

Marrs Professional services — New York City, USA
Healthcare IT consultant — 01/2015-04/2015

- Developed a mobile application for Enhanced Complete Ambient Assisted Living of elderly populations with multiple chronic diseases.

Visagio Australia Perth, Australia

Management Engineering Intern 10/2013-08/2014

- Built a mobile application for remote registration of employee details into the MS SQL database.

Division of Bioengineering, National University of Singapore Singapore

Research engineer 04/2008-04/2010

- Implemented software for prediction of hip fracture risk in the elderly populations.
- Employed machine learning techniques to improve the computational speed of indirect prediction of soft tissue material properties by 2000 times.

School of Medicine, National University of Singapore Singapore

Research assistant 07/2007-02/2008

- Performed numerical simulations of air flow through the human nose for improving medical treatment of the severely blocked nose condition.

SCHOLARSHIPS/AWARDS

- Received International Postgraduate Research Scholarship (200,000 $) to pursue doctoral studies at the University of Western Australia from 2011 to 2014.
- Awarded Singapore-MIT Alliance Graduate Fellowship (80,000 $) to pursue the Master's course during 2005-06.
- Received Australian Computer Society scholarship (3600 $) for my work on management engineering.

PUBLICATIONS

- **Garlapati, R. R.**, Lee, H. P., Chong, V.F. H., & Wang, D. Y. (2009). Indicators for the correct usage of intranasal medications: a computational fluid dynamics study. The Laryngoscope, 119(10), 1975-1982.
- **Garlapati, R. R.**, Joldes, G. R., Wittek, A., Lam, J., Weisenfeld, N., Hans, A. et al. (2013). Objective evaluation of accuracy of intra-operative neuroimage registration. In Computational Biomechanics for Medicine (pp. 87-99). Springer New York.
- **Garlapati, R. R.**, Roy, A., Joldes, G. R., Wittek, A., Mostayed, A., Doyle, B. et al. (2014). More accurate neuronavigation data provided by biomechanical modeling instead of rigid registration: Technical note. Journal of neurosurgery, 120(6), 1477-1483.

INTERESTS

- Chess, Tennis, Ping pong, Movies, Cricket and Soccer.