Malladi Deepak Kumar

Phone Number:+91-9490816545Email:kapeed2091@gmail.comGithub:github.com/kapeed2091Website:deepakmalladi.com

Education

Degree	Institute	Stream	Performance
MS (2012-16)	IIIT – Hyderabad	Natural Langauge Processing, CS	8.0/ 10 (CGPA)
B. Tech (2008-12)	IIIT – Hyderabad	Computer Science and Engineering	8.0/ 10 (CGPA)
Senior Secondary	Sri Sai Vikas Junior College	MPC	93.8 %
Secondary	Sri Gowthami Public School	SSC	92.5 %

MS Thesis

Context Based Morphological Analysis - <u>Download Link</u>
 "Built a ML based morphological analyzer for Indian lanaguge which works in a sentential context.
 Earlier efforts were based on rules and doesn't take context into consideration."
 Advisors: Dr. Dipti Misra Sharma, Prashanth Mannem

Professional Experience (Linkedin Link)

- Backend Architect at iB Hubs (Feb 2014 Present)
 - o Built commonly used modules used for various projects/startup that iB Hubs supports
 - Users/Groups/Notifications/Leaderboards/etc as a service
 - Deployed several microservices to AWS cloud
 - Extensively used serverless architecture for microservices
 - Adaptive Engine for Learning
 - Developed a learning framework where 3rd parties can host their course content which is consumed by end users
 - Deployed an e-Learning system in multiple universities that's been simultaneously used by more than 3000 users
 - Works in low computation devices as well, hence can be easily deployed and scaled
 - Technical challenges faced: Designed architecture such that the software can be deployed in low computation devices (RAM: 1GB, CPU: 4× ARM Cortex-A53, 1.2GHz).
 Approximately, server can handle 30-35 concurrent requests in such devices.
 - o Gamification service
 - Developed backend related code to create matches/tournaments
 - Included gamification features which can be plugged into any other game as well
 - Transparency framework
 - iB Hubs supports an NGO Make the World Wonderful (MTWW).
 - Provided technical assistance to MTWW which enables them to ensure that their system in 100% transparent
 - Kossip
 - Conducted a daily online competition for consecutive 125 days
 - Handled traffic of over 3000 members
 - Trained more than 100 people in technical aspects
- Technical Analyst at VedaSemantics, NLP/TextAnalytics startup (July 2013 Jan 2014)
 - o Worked on

- Topic-Theme Identification
- Summarization
- Intent Analysis
- Research Assistant in Language Technologies Research Center (LTRC), IIIT-H
- Developed and Maintained websites for international conference (COLING-2012) workshops.

Technical Skill Set

Programming Languages	C, C++, Java, MATLAB	
Scripting Languages	Python, Shell scripting	
Web Technologies	HTML, CSS, PHP, Cgi-Bin	
Operating Systems	GNU/LINUX, Windows XP/Vista/7	
Frameworks	Django, Django Rest Framework, Flask, Web2py, Zappa	
Cloud	AWS, GCP	
Database Management	MySQL, Postgres, Redis	
Miscellaneous	Microservices, Latex, Vim, SVM Tools, Weka, Git, NLTK	

Publications (Google Scholar Link)

- Statistical Morphological Analyzer for Hindi IJCNLP, 2013
 DK Malladi, P Mannem
- Context Based Statistical Morphological Analyzer and Its Effect On Hindi Dependency Parsing SPMRL, EMNLP, 2013
 DK Malladi, P Mannem
- Ensembling Various Dependency Parsers: Adopting Turbo Parser for Indian Languages MTPIL, COLING, 2012
 Puneeth Kukkadapu, **DK Malladi**, Aswarth Dara
- Improvised and Adaptable Statistical Morph Analyzer (SMA++)
 S Srirampur, **DK Malladi**, R Mamidi
- A Novel Approach Towards Building a Portable NLIDB System Using the Computational Paninian Grammar Framework - IALP, 2012
 Abhijeet Gupta, Arjun Akula, Deepak Malladi, Puneeth Kukkadapu, Vinay Ainavolu and Rajeev Sangal

Relevant Course Work

Natural Language Processing	Computational Linguistics	
NLP Applications	Computer Programming	
Data Structures & Algorithms	Database Systems	
Operating Systems	Distributed Systems	
Algorithms	Computer Networks	
Operating Systems	Distributed Systems	

Academic Achievements

- Recipient of IIIT Deans scholarship award for academic excellence.
- 'Young Genius Award' for achieving State 2nd Rank in C.V.Raman Test.
- State 4th in Regional Maths Olympiad (RMO).
- Distinction in both Maths & Science Macmilan Talent Test, University of South Wales.
- Selected for Under-Graduate Course in Nanyang Technological University, Singapore.

Major Projects

Dialog Systems

Advisor: Dr. Rajeev Sangal

Built a generic frame based Dialog System which is adaptable for different domains. The natural language query is taken as input and it is converted to a SQL query.

Tools Used: Python, HTML, CSS, Cgi-Bin, Javascript.

• Machine Translation Evaluation Interface

Advisor: Dr. Sriram Venkatapathy

It is an Evaluation Interface which takes feedback from various users and based on that it evaluates the correctness of the Machine Translation.

Tools Used: PHP, MySql, HTML, CSS.

Web Proxy Server

Advisor: Dr. Bezawada Bruhadeshwar

Developed a TCP/UDP server-client browser interaction mechanism that serves the HTTP requests using Multi-threaded programming.

Tools Used: Java, Socket Programming.

Software Library

Advisor: Dr. Vikrampudi

Designed a interface where we can upload and download softwares. Additional features such as listing the software according to its type, search option are also implemented.

Tools Used: Web2py

Extra Curricular Activities

- Campaigning-Coordinator for Felicity 2011, Annual Techno-Cultural fest in IIIT-Hyderabad.
- Represented our batch in IIIT-Hyderabad Chess Tournament and secured 3rd place.
- Semifinalists in Caroms Tournament conducted in IIIT-Hyderabad.