Vamsee Chamakura

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Education

Year	Degree/Certificate	Institute	CGPA/Percentage
2017 (expected)	B.Tech.	IIIT - Hyderabad	8.6/10.0 (5 semesters)
2013	12^{th} Class	Narayana Junior College, Hyderabad	96.1%
2011	10^{th} Class (CBSE)	Delhi Public School, Hyderabad	10.0/10.0

Major Projects

Genie *September '15 - Ongoing*

*A chat-based personal assistant app that helps you get more things done.(**Personal Project**)*

- An iOS app and Android app which enables users to ask for anything legal and we get it done.
- Future goals include using AI to automate responses without any human interference and develop commands that get things done instantaneously.(*www.getgenie.ai*)

Image Segmentation in Retinal Images *August '15 - Ongoing*

Honors Research Project under Dr. Jayanthi Sivaswamy (Dean Academic, IIIT-H)

- Implemented segmentation of optic disc(OD) and optic cup(OC) using a graph cut based energy minimization approach with priors.
- Working on re-modeling this approach to segment different layers in OCT scans of retinal images.

Experience

iOS Developer Intern *July '15 - October '15*

*Bite (**Wyrme**)*

- Built an iOS application which lets users to make reservations for home made meals being served at their home.
- There is a complete social aspect where one can share chef profiles, reviews, etc. They can like and comment on reviews, rate chefs etc.
- The technologies used were Swift, Parse and several external pods.

NodeJS Backend Developer Intern *May '15 - June '15*

*FlowApp (**FlowApp.io**)*

- The goal of the project was to connect cloud apps and run automated business workflows based on an event.
- Developed an API which could be called to listen to an event and schedule jobs, i.e. when a particular trigger took place, a predefined set of actions take place.
- The technologies used were NodeJS.

Web Developer Intern *July '14 - September '14*

*Website (**EnglishonPhone**)*

- Collaborated with other team members on projects and events. Work in all aspects of enhancing digital presence via the website and other online assets.
- Major tasks include developing several websites and maintaining them.
- The technologies involved were PHP, HTML, CSS, JS and Wordpress.

Short Term Projects

Wikipedia Search Engine *Spring '16*

Course Project: Prof. Vasudeva Varma(Dean Research, IIIT-H), Information Retrieval & Extraction

- Built a real-time search engine on the Wikipedia Data Dump(46GB) making our own primary & secondary index. Multi-word and multi-field search on Wikipedia Corpus was implemented.
- Tokenisation, stop-word removal and stemming were done as pre-processing. Various heuristics for ranking search results including TF-IDF scores, etc were implemented. This project was implemented in python.

Sentiment Analysis of Short Texts *Monsoon '15*

Course Project: Prof. Avinash Sharma(Assistant Professor, IIIT-H), Statistical Methods in AI

- The goal of this project is to use NLP techniques to classify short texts like Twitter Tweets or small movie reviews.
- The method that will be used involves extracting features from sentence-level, word-level and character level.
- These features will be used to train a Convolutional Neural Network which will give the relation between words and between characters. This is used to determine the sentiment.

Second Opinion *May '15*

*AngelHack Hyderabad 2015(**Among Top 8 teams and Honorable Mention**)*

- Built an iOS application for end users and a web portal for doctors to schedule an appointment over the phone.
- This application gives users a second opinion about their medical diagnostics. This can also be used as a primary medical consultation service, which could be made available at a cheaper rate.
- The technologies used were Swift, Parse and Bootstrap for the web portal.

Ultimate Tic-Tac-Toe *Spring '15*

Course Project: Prof. Praveen Paruchuri(Associate Professor, IIIT-H), Artificial Intelligence

- Created a 9x9 Tic-Tac-Toe playing artificial rational agent, which was implemented in Python.
- Used Artificial Intelligence Concepts like Adversial Search, and GameTheory Concepts.

Carroms Game *Spring '15*

Course Project: Prof. Anoop M. Namboodiri(Assistant. Professor, IIIT-H), Graphics

- Built a carroms game. This was a 2D game, which incorporated all basic physics. This was built in C++ using OpenGL libraries.

TCP/UDP File Sharing Protocol *Spring '15*

Course Project: Prof. Shatrunjay Rawat(Systems Associate Professor, IIIT-H), Computer Networks

- Developed an application Level File Sharing Protocol with support for download and upload for files and indexed searching. Implementation done in C.
- The User can choose between TCP and UDP for transfer of files between the shared folders, check for any changes made to the shared folders and uses MD5 checksum to handle file transfer errors.

Mini Bash Shell *Monsoon '14*

Course Project: Prof Suresh Purini(Assistant Professor, IIIT-H), Operating Systems

- Built a mini bash terminal using Linux's pthreads. Implemented input output redirection functionality.
- Implemented 'ls' command supporting several flags

Relevant Courses (*Pursuing in Spring '16)

Mathematics I, II, III	Graphics	*Principles of Information Security
Computer Programming	Artificial Intelligence	*Information Retrieval & Extraction
Data Structures	Introduction to Databases	Statistical Methods in AI
Algorithms	Structured Systems Analysis & Design	Computer Networks
IT Workshop	Complexity and Advanced Algorithms	Digital Signal Analysis & Applications
Computer System Organization	Digital Image Processing	Engineering Systems
Operating Systems	*Computer Vision	Formal Methods

Computer Skills

Languages and Tools: C, C++, HTML, CSS, JavaScript, jQuery, Python, MongoDB, PHP, MySQL, Bash Scripting, Matlab, OpenGL, Swift
Platforms and Frameworks: Ruby on Rails, Bootstrap, Android, iOS, Web2py, NodeJS
Operating Systems: Windows, Linux, OSX

Certificates

- **Android Developer Nanodegree** offered by **Google** in **Udacity** (Ongoing)
  Google & Tata Trust Scholarship Awardee (Profile Link)
- **Programming Mobile Applications for Android Handheld Systems: Part 2** offered by
  *University of Maryland, College Park in **Coursera***
- **Programming Mobile Applications for Android Handheld Systems: Part 1** offered by
  *University of Maryland, College Park in **Coursera***
- **Algorithms: Design and Analysis, Part 1** offered by
  *Stanford University in **Coursera***

Profile Links

- GitHub
- LinkedIn