SAHIL M. MODAK

Graduate Student at University of Southern California



EDUCATION

University of Southern California GPA: 3.61

Master's in Computer Science Aug'16-May'18

Courses: Analysis of Algorithm, Artificial Intelligence, Natural Language Processing, Machine Learning, Information Retrieval and Web Search Engines, Databases

University of Mumbai

Bachelor's in Computer Engineering Aug'12-Jun'16
Recipient of the JRD Tata Scholarship for full tuition for 1st and 2nd year of undergraduate program

SKILLS

Programming Languages: Java, C **Scripting Languages**: Python

Web Tech: HTML, CSS, JavaScript, PHP, ASP.NET **Databases**: MySQL, PostgreSQL, SQLite, TinkerPop **IDE**: NetBeans, Eclipse, PyCharm, Visual Studio

WORK EXPERIENCE

WG2B LLC Los Angeles, CA
Software Developer Intern Jun'17 – Aug'17
Project: Jibo for Alzheimer's Patients

Skills: Java, Python, Api.ai

- Worked closely with the core development team for interfacing natural language processing capabilities in Jibo, a robot, programmed as a care taker for Alzheimer's patients.
- Designed and developed an agent with several intents including time, weather, alarms, add/modify/delete events, get schedule and get event details, called upon by Jibo, for requests in natural language.

Univ. of Southern California Los Angeles, CA Web Developer Feb'17 – Dec'17

Project: Web App for Data Collection

Skills: HTML, CSS, JavaScript, Illume Manager

- Designing block adaptive tests for data collection as a part of Project Talent Aging Study (PTAS) in collaboration with the American Institute of Research (AIR).
- Programmed various cognitive measures including abstract reasoning, spatial visualization, number series, etc. to create a model of relationship between early life factors and later life cognitive impairment of a nationally representative sample of adults.

PROJECTS

Voice Driven Dynamic Generation of Web Pages

Published in IEEE Xplore ISBN: 978-1-5090-3291-4

Skills: Java, SQLite, Google Speech API

- Developed an application by incorporating natural language as a means for human computer interaction to design web pages
- This system would listen to the natural language commands, analyze them, understand the given task, extract all that is important and on that basis automatically generate a live output on screen

Hidden Markov Model: part-of-speech tagger

Skills: Python

GPA: 3.73

- Created a part of speech tagger using python to tag unknown words in the Catalan corpus.
- Implemented a Hidden Markov Model for training and identifying the appropriate tags for each word in the test set, by calculating transmission and emission probabilities using the Viterbi algorithm. Accuracy: 94%.

Hotel Reviews Classifier

Skills: Python

- Designed a classifier using python to classify a user's hotel reviews on Yelp.
- Analyzed existing user reviews on Yelp for training and implemented a Naïve Bayes classifier to classify new reviews as truthful or deceptive as well as positive or negative. Accuracy: 93%.

Blood Donation Agent System

Skills: ASP.NET, Microsoft SQL Server

- Created & administered a full-scale website for blood donation in Visual Studio using ASP.NET and Microsoft SQL server database
- Designed and implemented part of the system's interface using Photoshop and created the programs for extracting, updating and processing of the data.

Goods Transportation Manager System

Skills: Java, SQLite

- Developed a software for managing transportation of goods using Java and NetBeans
- Implemented functionalities to accept orders, generate bills, track and cancel orders. The accept order functionality was managed by keeping track of the space available to store new goods