Campus Address
3901 Locust Walk MB 130, Philadelphia, PA 19104

Deepan Saravanan

deepans@seas.upenn.edu
www.seas.upenn.edu/~deepans
github.com/DeepanS206
812.381.1987

Permanent Address
206 Winding Way, Batesville, IN 47006

EDUCATION

University of Pennsylvania: Philadelphia, PA
Networked and Social Systems Engineering (BSE) Aug. 2014 – present
Mathematics (Minor), Statistics (Minor)
GPA: 3.64/4.00

EXPERIENCE

CIS 110 (Introduction to Computer Science) Head TA Philadelphia, PA
Upenn CIS Teaching Assistant Team Jul. 2016 – present

- Manage 60 other teaching assistants for course
- Plan and lead weekly staff meetings and TA training sessions
- Work along with professor on course infrastructure, recitations, and weekly assignments

Data Science Research Philadelphia, PA
International Soccer Corruption Research at the PPE Department of the University of Pennsylvania May. 2016 – Aug. 2016

- Built several web-crawlers to retrieve crucial match information such as cards, penalties, nationalities, etc
- Efficiently parsed betting data for each of the games in the Champions and Europa League since 2007
- Coordinated with professor on matching crawled data with betting data for each game in the dataset

Introductory Functional Programming TA Philadelphia, PA
Computer science program at SAAST (Summer Academy of Applied Science and Technology) Jun. 2015 – Jul. 2015

- Assisted professor in teaching F# and basics of functional programming
- Held office hours in the evening for help with homework

PROJECTS

Graph Toolkit and Recommendation Engine

- Created a working toolkit with implemented graph algorithms for analysis of complex networks
- Used the Graph Toolkit to analyze weighted bipartite graphs of users to items being recommended, thus creating a simple recommendation system.
- Source code at https://github.com/sonicxml/RecommendationEngine

CAL9000

- Web-App that serves as an intelligent search engine for a user's Google Calendar. Built using Node.js, React, Express, and Firebase
- App takes user's Google Calendar account and tokenizes the upcoming events, storing each of the tokens in the database. User can then search by keywords located in an event's name or description, the date/time of the event, and the location of the event (queries that do not return relevant results when the default Google Calendar search is used).
- Source code at https://github.com/DeepanS206/CAL9000

HiveMind

- Web-App that enables users to crowdsource feedback for their potential activities. Built using Flask, Jinja2, Bootstrap, and MongoDB
- App allows users to post a series of activities (i.e. watching a movie, dinner at restaurants, etc.) and lets friends upvote/downvote the activities. Users can then decide on their plans based on the results of the polls.
- Source code at https://github.com/DeepanS206/HiveMind

UEFA Crawler

- Python scripts that crawl the UEFA Champions League and Europa League websites for match statistics. Built with lxml, xpath, and PhantomJS.
- Source code at https://github.com/DeepanS206/uefa_crawler

Tetris

- Created a Java implementation of the popular game Tetris, using the Swing GUI toolkit to implement the user interface.
- Source code at https://github.com/DeepanS206/Tetris

Skill Summary:

Technology: Java, Python (Pandas, Numpy, Flask, Jinja2), Javascript (Node, JQuery, Express), F#, OCaml, Linux/Unix, MapReduce, Hadoop, Amazon AWS, MongoDB, HTML/CSS, Excel

Coursework:

Algorithms (CIS 320), **Artificial Intelligence** (CIS 421), **Statistical Inference** (STAT 431), **Linux/Unix** (CIS 191), **JavaScript** (CIS 197), **Data Structures** (CIS 121), **Scalable & Cloud Computing** (NETS 212), **Math Foundations of Computer Science** (CIS 160)