Deepan Saravanan

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EDUCATION

University of Pennsylvania: Networked and Social Systems Engineering

GPA: 3.68/4.00

Philadelphia, PA Aug. 2014 – present

Batesville, IN

Batesville High School GPA: 4.15/4.00

Aug. 2011 – May 2014

EXPERIENCE

CIS 110 (Introduction to Computer Science) Teaching Assistant Team

Philadelphia, PA Aug. 2015 – present

Teaching Assistant

Assist in the understanding of class material through office hours

• Work along with professor on course infrastructure (i.e website, office hours queue)

Teaching Assistant for Introductory Computer Science Summer Program

RTA for Computer Science program at SAAST (Summer Academy of Applied Science and Technology)

Jun. 2015 – Jul. 2015

Philadelphia, PA

Assist professor in teaching F# and basics of functional programming

Hold office hours in the evening for help with homework

LEADERSHIP AND ACTIVITIES

Penn CommuniTech

Outreach Chair

Philadelphia, PA Aug. 2014 – present

- Tutor high school students in fundamentals of computer science
- Refurbish old hardware and donate to low income schools in working condition
- Market CommuniTech as an active community service organization

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, where the weight of an edge
 represents a user's rating towards the item. The graph was analyzed through the employed algorithms along with a collaboration filter
 based on similarity metrics.
- Source code at https://github.com/sonicxml/RecommendationEngine

PennBook

- Created a working Facebook-like, scalable web app using Node is, Express, and Amazon AWS
- Web-App allows for users to create accounts with an individual profile page for each user. User can then add/delete friends, post on the walls of friends, and comment on friends' status updates. Each user has a separate newsfeed page where status updates along with comments are presented in order of most recent update (similar to the newsfeed in Facebook). However, unlike Facebook, PennBook offers users to visualize their friend network (i.e. social graph) and receive friend recommendations. Recommendations were made by running the adsorption algorithm on the PennBook user graph via a separate Hadoop program ran on Amazon EC2.

Crazy Search

- Created a search engine using JavaScript and Node.js that takes a query and scrapes Google for results from Reddit, XKCD, YouTube, and Wikipedia. The results were then incorporated into a single webpage.
- Source Code at https://github.com/john-hewitt/pennapps15w

Skill Summary:

Technology: Java, F#, OCaml, Javascript (Node, Backbone, JQuery, Express, Angular), Linux/Unix, MapReduce, Hadoop, Amazon AWS, MongoDB, HTML/CSS, MATLAB, Excel

HR: Public Speaking, Marketing, Fundraising, Outreach, Event Management

Coursework:

Linux/Unix (CIS 191), JavaScript (CIS 197), Data Structures (CIS 121), Scalable & Cloud Computing (NETS 212), Market and Social Systems on the Internet (NETS 150), Programming Languages I (CIS 120), Math Foundations of Computer Science (CIS 160), Networked Life (NETS 112)