Prakhar Sinha

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Education

Portland State University, *Portland, OR* Sept '17 – Present
Masters in Computer Science, G.P.A: 3.53
Relevant Courses: Artificial Intelligence, Machine Learning, Human Computer Interaction, Software Engineering, Implementation & Testing

Narsee Monjee Institute of Management Studies, *Mumbai, IN* Aug '11 – May '15
Bachelors in Computer Science, G.P.A: 3.48
Relevant Courses: Artificial Intelligence, Human Computer Interaction, Design & Analysis of Algorithms, Data Structures.

Work Experience

Sphere, *Hyderabad, IN* Jan '17 – Aug '17
Associate Software Developer
Developed routing, tracking and scheduling applications for logistics & transportation companies. Worked an analytics framework that processed the data and provided descriptive analysis. Helped build a friendly user interface that enabled easy interaction with the application.

IBM India Pvt. Ltd, *Bangalore, IN* Aug '15 – Dec '16
Associate Systems Engineer
Part of the development team responsible for handling the Unix-to-Linux porting of an AT&T Enterprise ticketing and maintenance application, **TOPAS**. Worked on 3rd party modules and ensured seamless integration with the application server.

Projects

Minimum Spanning Trees *Java* Jan '19 – Mar '19
A comparative study amongst Kruskal's, Prim's and Boruvka's algorithms used to construct a Minimum Spanning Tree.

Deep Image Prior *Python* Sept '18 – Dec '18
A technical study on Image restoration techniques without using CNN's. Showed a randomly initialized neural network that is sufficient to capture low-level image statistics which can be used as a handcrafted prior with excellent results in standard inverse problems and invert deep neural representations to diagnose and restore images based on flash-no flash input pairs.

Simulator Scheduling *Python* Apr '18 – Jun '18
A comprehensive study on process scheduling in a Linux operating system. Compared a few scheduling algorithms to the Completely Fair Scheduler used by the Linux kernel.

Sliding Tiles *Android, Java* Jan '18 – Mar '18
Classic version of the n-Puzzle problem adapted for cellphones. A single or double player game with an option of playing to form a 1-15 sequence or assemble equations, from a randomized puzzle set. This android application can be played over Bluetooth or Wi-Fi.

Baseball Library *JavaScript, Express.js, Bootstrap, Postman* Sept '17 – Dec '17
A web application that filters information about baseball players from an online repository. The mechanics of the application works with a mix of HTML, CSS, JavaScript at the front end and an Express.js server running behind. Interface styled using Bootstrap framework. The request is filtered from a PostgreSQL database. The API's were tested using Postman.

MovieGram *Java, Android, Ubuntu OpenStack Server* Aug '14 – Apr '15
Basically Netflix, if it were on a private scale. The android application streams files hosted from a personal server. Video streaming codes were added as well. The server was built on the open source Ubuntu OpenStack Server. A comprehensive study went in comparing video codes to minimize the loss during transmission.

MyFilofax *Java, Android* Sept '13 – Jan '14
Built to organize a student's workload. The application keeps track of assignments due and reminds of the deadline. A simple poll monitors the attendance and notifies if low. Also features a portal that connects to Blackboard, to submit homework assignments from mobile devices.

Other Projects General Purpose Universal Kiosks, case study on Interaction Design (Jan '18). Snakes, the classic arcade game, ported using C++ (Jan '12) and a Library Management System in Java as a refresher. (Aug '11)

Skills

Languages: Java, Python, C++, C#, JavaScript, Ruby,SQL,
Frameworks: Android, MEAN, REST, jQuery, Bootstrap, Django, Flask, Git