ABHISHEK DINKAR RAUT

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EDUCATION

Binghamton University, State University of New York

Master of Science in Computer Science

Sant Gadge Baba Amravati University, Amravati, India

Bachelor of Engineering in Electronics and Telecommunication Engineering

August 2017-May 2019

GPA: 3.35/4.00

January 2020 - present

May 2018 - August 2018

August 2010-May 2014

GPA: 4.00/4.00

Languages: Java, Python, C#, C++, C, PL/SQL, HTML, CSS, JavaScript

Frameworks: .NET, Spring, React, Flutter, Django, Tensorflow, Junit

Cloud Services: AWS Certified Cloud Practitioner

Databases: Oracle, Microsoft SQL Server, MySQL, SQLite, PostgreSQL, MongoDB

Tools: Jenkins, Docker, Kubernetes, Git, Jira, Jupyter, Coverity

Research: Published Research papers in Computer networks, WSN, and the Artificial Intelligence field: https://tinyurl.com/googlepub

EXPERIENCE

Gainwell Technologies, El Paso, TX

Software Engineer

Developed software solutions, test cases, and documentation for the Nevada Medicaid System and was awarded Star Performer award - Aug' 20

- Reconstructed Nevada Medicaid's Medical Assistance Provider Incentive Repository (MAPIR) program from Java into a more effective embedded SQL C program and improved performance by 79%
- Identified and resolved the Provider ID leading zero defect by developing Unix job scripts, which was affecting 150,000+ healthcare providers

Live in Bing, Binghamton, NY

Data Science Intern

- Built a web application and neural network model for processing real estate data to predict property rent for incoming international university students using Python, React, Flask, SQLite, Keras, and TensorFlow
- Facilitated 1200+ international students in search of off-campus housing in the US by providing house rent estimation

Last Minute Preparation, Amravati, India

December 2015 - July 2017

CEO and Founder

- Collaborated with a cross-functional team of seven individuals to provide software training to 600+ undergraduate engineering students and achieved 250+ IT job placements
- Developed an eLearning website with features for Authentication, Enrollment, Payment Processing, Student Evaluation, and Feedback using HTML, CSS, JavaScript, jQuery, AJAX, and C# over ASP.NET MVC5

Infosys Limited, Mysore, India

Systems Engineer

December 2014 - December 2015

- Developed and provided support for the LOB applications of Infosys's Document Management System and achieved a client rating of 5.8/6.0
- Developed a Maker-Checker Browser for Claims processing workflow with features for Document & Profile Management, Audit Trail, and Reports
- Reported and rectified the large file upload issues on the SharePoint applications, which was affecting the entire user base of 5,800 users
- Developed a Large File Upload Client from scratch using the File Transfer Protocol to upload files to the server with a size above 40 MB

PROJECTS

Non-rigid Medical Image Registration System using Deep Learning

Research Project, Research Assistant, Professor Dr. Weiying Dai's Lab, Binghamton University, NY

February 2018 - December 2018

August 2018 - December 2018

- Built a Registration Framework (Python) based on a Convolutional Neural Network that directly learns transformations between pairs of threedimensional images without the need of manually annotated ground truth deformation information using Keras with a TensorFlow backend
- Achieved fast transformation estimation result in 180 milliseconds (average) on an NVIDIA GTX Titan X GPU with Pearson's correlation coefficient of 0.94 mm (x), 0.88 mm (y), and 0.49 mm (z) displacements between the ground truth and estimation for 300 pair of images of ADNI dataset

GPS Coordinates Emergency Alert Application

Academic Project, Binghamton University, NY

- Developed an Android application with functionality to send a location alert message while saving critical time during an emergency
- Used Accelerometer sensor and Kalman Filter algorithm to recognize shake gesture and Google Fused Location Provider API for location data

Recommender System

January 2018 - May 2018

Academic Project, Binghamton University, NY

- Developed a recommender system (Java) using the Item-based Collaborative filtering and Adjusted cosine similarity to compute the item similarity
- Achieved low 0.9 root mean squared error for the MovieLens Dataset of 1 million entries by implementing Weighted sum approach for prediction

Smart Gas Stove

January 2014 - February 2014

Research Project, Massachusetts Institute of Technology (MIT) Media Lab, Mumbai, India

- Designed a Smart Gas Stove with smartphone functionality for burner dial control and timer using Raspberry Pi to control servomotor over Wi-Fi
- Achieved a 30% increase in cooking time efficiency and a 20% decrease in monthly expenditure for Dharavi catering businesses

Control Model of Adaptive Headlight System

August 2012 - December 2013

Independent Work, IETE Cynosure (ICCEEE-2013), Lonere, India

- Developed an economical Adaptive Headlight Microcontroller based system (C++) to adjust the automobile's headlights to the road curves based on steering rotation using the CAN bus protocol
- Awarded the Institution of Electronics and Telecommunications Engineers (IETE) Mumbai Centre's Young Researchers Award 2013 (selected from 110 national and international researchers)