ABHISHEK DINKAR RAUT

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EDUCATION

Binghamton University, State University of New York August 2017-May 2019
Master of Science in Computer Science GPA: 3.35/4.00
Sant Gadge Baba Amravati University, Amravati, India August 2010-May 2014
Bachelor of Engineering in Electronics and Telecommunication Engineering GPA: 4.00/4.00

TECHNICAL SKILLS

- Java, Python, C#, C++, C, PL/SQL, HTML, CSS, JavaScript
- .NET Framework, Spring Framework, Ruby on Rails, Node.js, React, Redux, SOAP, REST, MS SQL Server, PostgreSQL, SQLite, MongoDB
- Microsoft Azure, Google Cloud Platform, AWS, TensorFlow, Docker, Kubernetes, Selenium, Maven, Ant, Git, TFS, Shell
- Agile Methodology, Scrum, Maintenance, Debugging, SDLC, TDD, CI/CD pipeline, Microservices, Client-facing, Leadership, Artificial Intelligence (Four Research publications)

EXPERIENCE

Live in Bing, Binghamton, NY May-August 2018
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 MVC 5

Infosys Limited, Mysore, India December 2014-December 2015
Systems Engineer

- Developed and provided support for the LOB applications of Infosys's Document Management System and achieved a client rating of 5.8/6.0
- Provided full life cycle support to the Infosys HR client from initial client interaction and requirement analysis through design, coding, testing, debugging, software implementation, and integration
- Developed a Maker-Checker Browser for Infosys's claims processing workflow with features for Document Management, 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
- Skills Used: .NET Framework, Microsoft SQL Server, Java, Python, C#, SQL, HTML, CSS, JavaScript, jQuery, and AJAX

PROJECTS

Non-rigid Medical Image Registration System using Deep Learning February 2018–December 2018
Research Project, Professor Dr. Weiying Dai's Lab, Binghamton University, NY

- Built a Registration Framework (Python) based on a Convolutional Neural Network that directly learns transformations between pairs of three-dimensional 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 August 2018- December 2018
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-February 2014
Research Project, Massachusetts Institute of Technology (MIT) Media Lab, Mumbai, India

- Designed a Smart Gas Stove with smartphone functionality for burner dial settings and timer using Raspberry Pi to control servo motor by Android application 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 (selected from 110 national and international researchers)