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

SKILLS

Languages: Java, Python, C#, C++, C, PL/SQL, HTML, CSS, JavaScript   **Databases:** Oracle, Microsoft SQL Server, MySQL, SQLite, PostgreSQL, MongoDB
Frameworks: .NET, Spring, React, Flutter, Django, Tensorflow, Junit   **Tools:** Jenkins, Docker, Kubernetes, Git, Jira, Jupyter, Coverity
Cloud Services: AWS Certified Cloud Practitioner
Research: Published Research papers in Computer networks, WSN, and the Artificial Intelligence field: tinyurl.com/citationsar

EXPERIENCE

Gainwell Technologies, El Paso, TX   January 2020 - present
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   May 2018 - 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 MVC5

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
- 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   February 2018 - December 2018
Research Project, Research Assistant, 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

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)

PATENTS

Australia Patent 2021104107, "A METHOD FOR EMPIRICAL RISK ASSESSMENT OF BRAIN DISORDER USING NEURAL NETWORK DIAGNOSTIC SYSTEM," Jul 13, 2021. Patent Pending.