Sumit Tamgale

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EDUCATION

ILLINOIS INSTITUTE OF TECHNOLOGY

Chicago, IL

M.S. Computer Science | Software Engineering

- Aug'18 May'20 • Relevant Coursework: Design and Analysis of Algorithms, Machine Learning, Computer Vision, Geospatial Vision and Visualization, Software Systems Architectures, Object-Oriented Application Development
- GPA: 3.0/4.0

SGGS Institute of Engineering and Technology

Nanded, MH, India

B.Tech. Computer Science & Engineering

Aug'14 - May'18

- Relevant Coursework: Data Structures, Algorithms, Statistics, Calculus, Database Systems, Operating System Concepts, Software Engineering, Unix System Programming, Networking, Distributed Computing, Neural Networks
- GPA: 7.27/10.0

WORK EXPERIENCE

BLUE CROSS BLUE SHIELD ASSOCIATION

Chicago, IL

Intern - Enterprise Data Services (EDS)

Jun'19 - Aug'19

- Significantly improved data validation efficiency by automating the processes using scalable python modules
- Integrated the modules with existing DevOps automation suite
- Collaborated with EDS team to deploy and document new version of the suite

SARVAHA SYSTEMS Pune, MH, India

Software Engineer May'18 - Aug'18

- Developed and deployed a customizable customer support chatbot system in Python and JavaScript using RASA framework
- Enabled a very high degree of configuration options in the admin console by re-engineering the backend design
- Developed data connectors to import knowledge in chatbot from various sources(FAQs, manuals, etc.) by using NLP models Software Engineering Intern Jan'18 - Apr'18
 - Developed an information retrieval system to perform logical search queries on raw resume files in Java using Deeplearning4j
 - Achieved an F1 score of 0.87 for the IR model by using an ensemble method of neural networks and CRF models
- Reduced resume filtering time by 40% by integrating the application with an existing HR management system in the company

Swish Tech Web Development Intern | Backend Team Pune, MH, India

Nov'16 - Apr'17 Developed secure REST API in Java to perform real-time event management and analysis in Java using Spring framework

- Reduced development time by 25% by collaborating with the project manager to design software architecture and data model
- Significantly improved application security by adding encryption to basic authentication

SELECTED INDEPENDENT PROJECTS

DISGUISED FACE CLASSIFICATION MODEL (LINK TO PAPER)

Aug'17 - Dec'17

- Designed and developed an application to identify disguised faces using a deep convolutional neural network model
- Achieved an accuracy of 0.91 by using cross validation and training the model on a custom developed robust dataset
- Tested the model in a simulated ATM system for preventing fraud ATM transactions by identifying disguised faces

CATEGORY BASED VIDEO EXPLORER

Dec'16 - Apr'17

- Developed an application to browse and watch category based videos available on any public server in Java and Python
- Reduced significant server load by streaming videos from original host server using dynamically scraped video URLs
- Achieved high efficiency of web scraper by eliminating database bottleneck using a separate assistive process

CHESS CLOCK SIMULATOR

- Developed a standalone application to manage chess tournaments and simulate chess clock in Java using JavaFX and Threads
- Achieved highly efficient clack simulation by using a single thread implementation controlled by events
- Extended the application by exposing the simulator through URL call using Java applets

SKILLS & INTERESTS

- Languages/technologies: Proficient in Java, Python, JavaScript, SQL; familiar with PHP, R, MATLAB; previously used: C, C++; Experienced with jQuery, AngularJS, Node.js, Spring, TensorFlow, Elasticsearch, Git, Amazon Web Services, Docker, MySQL, Oracle DB, Android, Unix/Linux, Flask, Selenium
- CS Skills: Machine Learning, Object-Oriented Programming, Natural Language Processing, Image Processing, Computer Vision, Software Design, RESTful web services

Honors & Awards

- Best Paper Award IEEE International Conference on Computational Intelligence and Computing Research 2017
- Winner Smart India Hackathon 2017 (Department of Biotechnology), Ministry of Science and Technology, Govt. of India
- Winner C Brain 2017 SGGS Institute of Engineering and Technology, Nanded MH, India
- Runner up Code-em-gamble 2016 SGGS Institute of Engineering and Technology, Nanded MH, India
- Ranked 549 & 686 globally in TCS CodeVita 2016 round 1 & 2 respectively

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