

Sumit Tamgale

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EDUCATION

ILLINOIS INSTITUTE OF TECHNOLOGY

Master of Computer Science

Chicago, IL

Aug 2018 - May 2020

- Coursework: Advanced Algorithms, Machine Learning, Computer Vision, Software Architectures, Object-Oriented Application Development, Advanced Database Organization, Geospatial Visualization, Software Project Management, Cloud Computing, Natural Language Processing

SGGS INSTITUTE OF ENGINEERING AND TECHNOLOGY

Bachelor of Technology - Computer Science & Engineering

Nanded, India

Aug 2014 - May 2018

- Major Coursework: Data Structures, Algorithms, Statistics, Calculus, Database Systems, Operating Systems, Software Engineering, Unix Systems, Networking, Machine Learning, Discrete Mathematics, Computer Architecture, Cryptography
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WORK EXPERIENCE

BLUE CROSS BLUE SHIELD ASSOCIATION

Programmer - Enterprise Data Services

Chicago, IL

Sep 2019 - Present

- Reduced end-to-end data exchange time by 80% using dynamic attribute configuration implemented in a python package
- Improved the accuracy of the exchanged data by 25% using generic sanity checks and exception handling on multiple levels
- Improved the security and reliability of the data exchange platform by adapting gpg encryption

Summer Intern - Enterprise Data Services

Jun - Aug 2019

- Reduced excel reports' validation time by 90% by automating the process using dynamically customizable python package
- Increased the scalability of the python package by implementing generic connectors that allow all formats and data types
- Increased the speed by 40% by eliminating query execution bottleneck by parallelizing it with other independent jobs

SARVAHA SYSTEMS

Software Engineer

Pune, India

Jun - Aug 2018

- 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 - Apr 2018

- 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

Pune, India

Nov 2016 - Apr 2017

- 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
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SELECTED INDEPENDENT PROJECTS

DISGUISED FACE CLASSIFICATION MODEL ([LINK TO PAPER](#))

Aug - Dec 2017

- 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

CATEGORY BASED VIDEO EXPLORER

Dec 2016 - Apr 2017

- Developed an application to browse and watch category based videos available on any public server using Java and Python
- Reduced significant server load by streaming videos from original host server using dynamically scraped video URLs

CHESS CLOCK SIMULATOR

Aug - Oct 2016

- 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
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SKILLS & INTERESTS

- Languages/technologies: Proficient in Java, Python, C, JavaScript, SQL; familiar with C++, PHP, R, MATLAB; Experienced with jQuery, AngularJS, Node.js, Spring, TensorFlow, Elasticsearch, Git, Amazon Web Services (AWS), 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
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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