

SANDEEP CHINDALUR BALAJI

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EDUCATION

- **Arizona State University** Tempe, Arizona
Master's in Computer Science GPA: 3.67/4 May 2020
Coursework: Distributed Software Development, Foundation of Algorithms, Intro to Theory of Computation, Software Security.
- **BMS College of Engineering** Bangalore, India
B.E in Electronics and Communications GPA: 8.05/10 May 2015
Coursework: Data Structures, Object-Oriented Programming, Computer Networks, Operating Systems, Signals & Systems.

TECHNICAL SKILLS

- **Languages and Libraries:** python, C, C++, Java, Linux, Shell, Data Structures, SQL, PL/SQL
- **Web Technologies:** python-flask, SpringBoot, Hibernate, AngularJS, NodeJS, JavaScript, Bootstrap, AJAX, jQuery
- **Databases:** MongoDB, MySQL, PostgreSQL, Oracle, Redis
- **Tools/Framework:** Nginx, Apache, GIT, Docker, Kubernetes, Google Cloud, AWS, Jenkins, JIRA, Elastic search

WORK EXPERIENCE

Software Engineer | gnani.ai (Startup) Aug 2017 – July 2018 | Bangalore, India

- **Automatic Speech Recognition [python, C++, Linux, shell, Kaldi, flask]**
 - Designed programs for parallel execution of text cleaning on a corpus of over 1 billion lines using NLTK kit.
 - Developed REST APIs for speech decoding, diarization using python-flask and released public API.
 - Developed web application for collection of speech data over Tornado WebSockets.
- **Speaker Diarization for telephonic conversations [python, C++, shell, Kaldi, Speech feature extraction]**
 - Developed application using open-source framework Kaldi for diarization of telephone conversations over the noisy environment. Based on i-vector extraction and clustering of those i-vectors.
 - Deployed and exposed APIs using python-flask for speech decoding on google kubernetes engine.

Software Engineer | Tata Consultancy Services Dec 2015 – Aug 2017 | Bangalore, India

- **Oracle Retail Applications [Java, SpringBoot, Hibernate, Oracle SQL, PL/SQL]**
 - Implemented Goods & Services Tax in Oracle Financial application by developing Spring boot APIs.
 - Developed stored procedures for defragmentation of all schemas in an Oracle database on 800 GB data.
 - Redesigned the application for continuous integration and finance data flow between Oracle applications.

Academic Tutor | Arizona State University Oct 2018 – Apr 2019 | Tempe, Arizona

- Responsible for tutoring under-graduates on basic key concepts of computer science.
- Tutor for Data Structures, Algorithms, Principles of programming languages, Theory of computation courses.

PROJECT WORK

- **Secure Banking Application** Jan 2019 – May 2019 | Tempe, Arizona
 - Built a web application using Angular.js, spring boot and hibernate that focused on implementing various security features.
- **Attribute Mining & Search Relevance Prediction** Jan 2019 – May 2019 | Tempe, Arizona
 - Prediction of the relevancy score of a search query and product description using word2vec, fuzzy string extraction and attribution mining.
- **Traffic Rules Learning using Deep-Q networks** Jan 2019 – May 2019 | Tempe, Arizona
 - Training an autonomous vehicle for learning traffic rules using Q-learning and neural networks. Simulated on the SUMO traffic environment.
- **Sudoku Solver - Q learning** Oct 2017 – Nov 2017 | Bangalore, India
 - Basic Sudoku solver using Reinforcement learning written in python. Built as a personal project using Keras, pandas and numpy packages.
 - Solves a medium level Sudoku within a running time of 30s and low level in less than a second.

AWARDS

- **Sunhacks '18 - Best IoT hack & 2nd place** Nov 2018 | Tempe, Arizona
Computer Vision application for fall detection of elderly and emergency alert which saves \$50/month.
- **Inferno Hacks '18 - 2nd place** Nov 2018 | Tempe, Arizona
Google assistant application to train employees. Uses spaced repetition & vocalization to improve recall by 92%.
- **Hack Arizona '19 - 2nd place in 'AI in Recruitment' category** Jan 2019 | Tucson, Arizona
A platform for recruiters and applicants that predicts the probability of getting hired/becoming a top performer.