Dhiraj Shanbhag

EDUCATION

INDIAN INSTITUTE OF SCIENCE
M Tech in Computer Science
June 2020 | Bangalore
CGPA: 7.7/10
Advisor: Prof. Chiranjib Bhattacharyya

SRI JAYACHAMARAJENDRA COLLEGE OF ENGINEERING (SJCE)
B.E. in Computer Science
May 2013 | Mysore
CGPA: 9.33

GOVT. PU COLLEGE
12th
April 2009 | Karwar
Percentage: 90.83

BALAMANDIR HIGH SCHOOL
Secondary
April 2007 | Karwar
Percentage : 95.36

COURSEWORK

Linear Algebra and Probability
Machine Learning
Pratical Data Science
Computational methods of Optimization
Autonomous Navigation
Stochastic Models and Applications
BioInformatics

SKILLS

PROGRAMMING
Python • C

EXPERIENCE

HEWLETT PACKARD ENTERPRISE(HPE) | Software Engr II
March 2018 – July 2018 | Bangalore
- Prototyped RSVP-HA-GR protocol on HPE hardware.

JUNIPER NETWORKS | Software Engineer-2
Jan 2017 – Sep 2017 | Bangalore
- Worked on Routing Protocol Daemon of Junos OS.

IP INFUSION | Senior Software Engineer
July 2013 – Dec 2016 | Bangalore
- Worked on MPLS protocols of ZebOS network stack.
- Leveraging DPDK to improve performance of ZebOS.

PROJECTS

• Currently working on **LIDAR based autonomous system** project.
Worked on an idea to use **VAE** to solve the occlusion problem caused by static/dynamic obstacles. Working on **SLAM, motion-planning** and problems related to **occlussion**.
• **Case Studies :**
 Taxi Demand Prediction: To find number of pickups, given location cordinates and time, in the query region and surrounding regions.
Recommendor Systems: Explored collaborative (Netflix dataset) and content based recommendation.
Cancer Diagnosis: Task is to classify a given genetic mutation into one of the 9 classes. This transforms to a Multi class classification problem.
Worked on these case-studies to explore EDA, data-cleaning and other phases in the pipeline. Implemented different ML models on these datasets and analyzed their performance.
• Implemented Policy gradient algorithms: **Reinforce, Actor-Critic**. Compared their performance on **OpenAI Gym's** cartpole and lunar-lander environments.

AWARDS

2018 42nd rank in GATE-2018
2015   Best Individual Contributor award at IpInfusion.
        This was in recognition to the contributions done as part of Tunnel-Infra prototype and RSVP-GR projects.