

Alisetti Sai Vamsi
B.Tech (Bachelor of Technology) in Computer Science & Engineering, Indian Institute of Technology (IIT), Palakkad

Email: saivamsi.ds123@gmail.com
LinkedIn: <https://www.linkedin.com/in/sai-vamsi-alisetti-4892a4197/>
GitHub: <https://github.com/Vamsi995>
Mobile: (+91)7995939741

EDUCATION				
COURSE	SPECIALIZATION	INSTITUTE/COLLEGE	%/CGPA	Year of Completion
Undergrad.	Computer Science	Indian Institute of Technology, Palakkad (IIT)	8.64	June, 2022
XII	Science	Narayana Junior College	97%	2018
X	Science	Narayana Olympiad School	88%	2016

TECHNICAL SKILLS	
Research Interest: Deep Learning, Reinforcement Learning, Natural Language Processing, Computer Vision, Algorithms	
Technical Proficiency – Advanced Level	
Programming Languages	Python, C/C++/C#, JavaScript, Java, Verilog (HDL), SML, Bash
Frameworks	TensorFlow, PyTorch/Lightning, React, Nodejs, Flutter, Figma, Git & GitHub
Operating Systems	Linux – Ubuntu (Daily Driver), Windows
Computing Environments	MATLAB, Vivado Design Suite, Docker
Databases & Cloud	MySQL, GCP, MongoDB, AWS
Embedded/Hardware Frameworks	FPGA, Ultimaker 3D printing, Arduino

WORK EXPERIENCE	
AirAsia Software Development Engineer <ul style="list-style-type: none">Working on improving the search experience of AirAsia across all platforms.Designed backend architectures and developed microservices using spring boot and MySQL to improve/optimize search functionality.Reduced platform downtime by 60% by revamping backend data pipeline responsible for supplying flight details.	Aug 2022 to Present
Indian Institute of Science (IISc), Bangalore Summer Research Intern <ul style="list-style-type: none">Working on developing coordinated MARL (Mutli Agent Reinforcement Learning) algorithms for collision avoidance in open traffic systems and to mitigate phantom jams in closed traffic systems.Setting up custom RL environments using PyGame and OpenAI Gym and running simulations leveraging Tensorflow GPU.	Jun 2021 to May 2022 <i>Supervisor: Dr. Tarun Rambha</i>
Gritly (Formerly Internalyze) Founding Team Member Lead Backend Developer <p>At Gritly, we provide a platform for students to break into the sales industry by educating and training students through sales bootcamps and networking with partner companies for possible job opportunities. Being one of the starting 8 founding team members, I took the charge to architect the entire backend development.</p> <ul style="list-style-type: none">End-to-End NoSQL Database Design (MongoDB)Full Stack Design for website and classroom management toolCollaboration through UI/UX designCustomer Development	Jul – Dec 2020
UST Global Research Intern <ul style="list-style-type: none">Worked on building production level Paraphrase Generator using SOTA NLP transformer architectures.Developed a web API using streamlit and flask for model inference.Built a data generation CLI tool using the paraphrase generator for creating datasets with similar semantics.	Jun – Aug 2020
Timken Engineering & Research India Pvt. Ltd Application Engineer <ul style="list-style-type: none">Full Stack Development with C#, ASP.NET, SQL.Added core feature updates to the Job Management software and refined UI elements using Javascript and jQuery.	Dec – Dec 2019

PROJECTS	
Multi Agent Reinforcement Learning for Cooperative and Independent behaviors on Highways <p>Developing novel coordinated MARL algorithms to avoid collisions on highways and dissipating traffic congestion waves in ring road systems. Analyzing cooperative and independent driving policies in multi agent systems in different traffic scenarios.</p>	August 2021 – May 2022

Sparse Reward Propagation for Deep Reinforcement Learning Constructing a potential-based reward shaping function automatically from the MDP using a Graph Convolutional Network (GCN) and augmenting it on the sparse reward system to propagate rewards and accelerate RL algorithms. Proto Value Functions (PVF) have been used as features into GCN, since PVF from basis of value function space. Link	Feb 2021 – May 2021
Advantage Actor Critic with Nesterov Accelerated Gradient Improved the advantage actor critic algorithm using the Nesterov Accelerated Gradient instead of stochastic gradient descent for faster convergence of the policy. Link	Dec 2020 – Feb 2021
Paraphrase Generator A Paraphrase-Generator built using T5 transformer model from the hugging face transformers library trained on the Google's PAWS dataset. The model inference API is built using streamlit and flask. Link	Jun 2020 – Jul 2020
IITPKD's Project Allocation Portal A web app built using MEAN stack for final year BTech project allocation. The algorithm used is a modified version of the Gale Shapely algorithm which can handle two-sided preference. The website is officially a part of the university and is hosted on the university's server using NGINX. Link	Mar 2020 – May 2020
Meet.me Meet.me is a collaborative screensharing/whiteboarding tool. Worked on Queue Management Module by implementing Weighted Fair Queueing Algorithm inside the Networking Main Module. Optimized networking performance by implementing event driven thread blocking. Link	Sept 2021 – Dec 2021

POSITION OF RESPONSIBILITY & AWARDS	
Gold Medal in Inter IIT Tech Meet Won the first place in Tata Center of Technology and Development (TCTD) Challenge in Inter IIT Tech Meet 2018 at IIT Bombay for developing proof of concept “Automated Pesticide Spraying Robot” for the problem statement “Farm tools that reduce drudgery”. The robot uses simple electronics to autonomously navigate fields while spraying pesticide by detecting plants. The chassis has a unique closed design enabling the robot to spray pesticide efficiently such that it reaches all the parts of the plant and avoid dispersion of pesticides due to wind. Link	Dec 2018
IIT Palakkad Technology IHub Foundation Agni U.G. Fellowship Research grant obtained by achieving the prestigious and competitive Agni UG fellowship for my project “Multi Agent Reinforcement Learning for Cooperative and Independent behaviors on Highways” for advances in Intelligent Collaborative Systems. Link	Sept 2021
Winter of Code (DSC NSEC) Top Contributor Top Contributor in the open-source program organized by the Google Developer Student Club from NSEC College on my project “Text Sentiment Analysis”. Link	Dec 2020
Creative Content Team Member/Interviewer Alumni Developed content for the yearbook and newsletter by conducting interviews of alumni and covering their stories. Link	Jun 2020 – Jan 2021
Web Team Member of Alumni Cell Development of the alumni website, and mentoring juniors in building end to end websites. Link	Jun 2020 – Jan 2021