

ARAVIND BALACHANDAR

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EDUCATION

UNIVERSITY AT BUFFALO, THE STATE UNIVERSITY OF NEW YORK
Master of Science in Data Science | GPA: 4.0/4.0

Aug 2023 – Dec 2024
Buffalo, NY

EASWARI ENGINEERING COLLEGE
Bachelor of Engineering in Computer Science | GPA: 8.15/10.0

Jun 2017 – Jun 2021
Chennai, IND

TECHNICAL SKILLS AND ADDITIONAL

Languages: C, Python, Go, Java, R, SQL, NoSQL, HTML, CSS, MATLAB, Beginner on Rust.

Operating System & Tools: Ubuntu, Linux, AWS, GCP, Git, VS code, Docker, Jira, Kubernetes, K9s, Azure, New Relic.

Others: ML Frameworks, CNN, RNN, NLP, Deep Learning, PyTorch, Tableau, Hadoop, Databricks, Clustering.

EXPERIENCE

QUICKPLAY MEDIA

Sep 2022 – Aug 2023
Chennai, IND

Software Engineer (Golang Developer)

- Drove an impressive 84% enhancement in system performance through comprehensive optimizations on functions, queries, and stored procedures for the Couchbase database.
- Streamlined database retrieval processes and reduced response time to an impressive 25% through the development of EPG micro-service.
- Led to self-service purging feature for storefront, catalog and config versions when approaching the maximum limit, minimizing developer hours spent on a purging to 20%.
- Initiated a feature for instant image information retrieval and rounded corner rendering without diminishing original, cutting processing time by nearly 60%.
- Accomplished for the creation and maintenance of 100+ critical backend infrastructures, encompassing databases, message queues, and caching layers.

ACCENTURE

Aug 2021 – Sep 2022
Chennai, IND

Application Development Associate (Python Developer)

- Spearheaded as a team to innovative design and construction of a content aggregator and expense tracker, yielding a remarkable 71% reduction in code churn.
- Innovated caching techniques resulted in a stunning 40% decrease in data access time, reduced latency, cut-down data load, and a 50% boost in total system efficiency.
- Tailored unique memory access flows to cater to the unique needs of over 100 clients.
- Collaborated seamlessly with 10+ different cross-functional teams to communicate and define API requirements and specifications.

PROJECTS

Emotion Recognition using Speech and Facial Gesture

Apr 2021

- Built a highly efficient real-time emotion recognition system achieving an average processing speed of 30 frames per second (FPS) utilizing OpenCV's Haar cascades for face detection.
- Leveraged transfer learning with a pre-trained deep learning model: ResNet15V2, achieving an emotion classification accuracy of 94% after fine-tuning its performance using hyperparameter tuning and optimizing model architecture.
- Curated and preprocessed a diverse facial emotion dataset comprising 8,000 annotated images, ensuring comprehensive emotion representation.

Virtual Keyboard and Mouse using Hand Gesture

Dec 2020

- Obtained average duration per character on virtual keyboard is 2.92 milliseconds, and system's average accuracy is 88.61%.
- Attained mean recognition rate under natural light is 2.3% higher than average recognition rate under lamplight.