

Prasanth Thomas Shaji

 Prasanth Shaji  paperbound
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Experienced in distributed systems, application programming, computer architecture, and embedded systems. Passionate about building lasting software.

Skills C, C++, Rust, Python, Golang, Java, UNIX, Bash, Emacs, VS Code, Docker (Container), Puppet (IaC / Orchestration), PyTorch (ML/ANN frameworks), Kafka, Git, Gerrit, JIRA, Agile

Experience

Scania

September 2022 - April 2023

Master's Thesis Worker

Reverse engineering Linux environments on i.MX6 based ECU, benchmarking Neural Network training in Embedded Platforms

Affle

September 2018 - February 2020

Software Engineer

After Vizury AdServing was acquired by Affle Pvt Ltd., migrated then maintained the AdTech platform in a 4-person team, set up DevOps best practises.

Vizury

July 2017 - August 2018

Software Engineer

Software Developer for Vizury AdServing, and lemnisk's FinTech CDP app. Migrated Java apps across cloud service providers (IBM SoftLayer to AWS).

Education

Uppsala University, Sweden

August 2021 - August 2023

Master of Science in Computer Science

4.71/ 5

Focused on Embedded Systems, Computer Architecture, and Performance Engineering.

NIT Calicut, India

July 2013 - June 2017

Bachelor of Technology in Computer Science & Engineering

7.85/ 10

Embraced Computational Thinking and Mastered Foundations of Computer Science.

Projects

Training Neural Networks on Embedded Devices

Masters Thesis @ Scania

Implemented programs to benchmark neural network training in C / C++ / Python / PyTorch. Completed benchmarking on ARM boards & through QEMU emulation.

Prefetch Strategies for Argo Distributed Shared Memory System

Uppsala University

ArgoDSM is a software distributed shared memory system written in C++. Implemented stride based prefetching of the DSM pages within ArgoDSM and analysed application performance.

Neural Network inference on Xilinx based FPGA

Uppsala University

Implemented Neural Network inference for handwritten digit recognition on Avnet MiniZed. Used the Zynq 7Z007S logic elements (FPGA) on the MiniZed using Xilinx Vivado.

Evaluated RPL+TSCH Network Performance using nRF51 DK

Uppsala University

Used TSCH and 6TiSCH capabilities of Contiki-NG operating system to test file transfer speeds using multiple nRF51 DK boards.

Migrating Kafka Data Pipeline from across AWS accounts

Affle

Completed the data pipeline ownership handover from Vizury to Affle. Migrated high volume event bus from one Kafka system to another without disrupting services.

Neural Network based OpenRTB Bid Calculations

Vizury

Developed and tested integrations for Tensorflow based DNN model inferences for a Real Time Bidding Engine.

Completed Migration of an Ad Server codebase from PhP to Java Springboot

Vizury

Completed codebase migrations from PhP to Java Spring Boot for an Ad Serving application. Set up DevOps CI/CD components such as orchestration through puppet.

Secure Distributed Hash Tables

B.Tech Project @ NITC

Implemented a distributed hash table in Golang using Raft as the consensus protocol and a sybil attack resistant cryptographic scheme.