

Suhas Narreddy

suhasnarreddy@gmail.com | linkedin.com/in/suhassn | github.com/sulaimansuhas

EXPERIENCE

Research Engineer

Turing Biosystems

Feb 2025 – Present

London, UK

- Lead engineer on TuringDB, a vectorised, column-oriented analytical graph database engine written in C++23.
- Led the design and implementation of a custom columnar network protocol, reducing query latency 32x.
- Researched, designed, and implemented novel cache-conscious join algorithms, over 50x faster than competing engines.
- Led the design and implementation of distributed TuringDB using a hybrid S3 and Raft architecture.
- Led the design of a page-table-like index for ultra-low-latency node and edge lookups.
- Cut a client's total memory consumption by 83% by profiling access patterns and moving to mmap-based access.

Software Engineer

CALA Fashion

May 2022 – Dec 2022

New York, USA

- Automated customer subscription management by integrating Stripe webhooks, eliminating occurrences of lapsed subscribers with access to the app.
- Developed a feature to auto-generate barcodes for products based on UPCs and SKUs, streamlining the process for the operations team.

EDUCATION

University of Edinburgh

Masters by Research in Computer Science

Edinburgh, United Kingdom

May 2023 – Aug 2024

Thesis: Accelerating the NVMe-oF protocol with Homa

University of Edinburgh

Bachelor of Science in Artificial Intelligence and Computer Science

Edinburgh, United Kingdom

Sep 2018 – May 2022

Thesis: Evaluation of state of the art network stacks

PROJECTS

NVMe over Homa | *C, Linux Kernel, Storage, Networking, TCP/IP, Low-latency*

May 2023 – Sep 2024

- Extended Linux NVMe-oF driver to utilize Homa, a datacenter-specific transport protocol.
- Mapped NVMe-oF procedures from TCP's stream abstraction to Homa's message-oriented RPC abstraction.
- Achieved up to 24% (P50) and 26% (P99) latency reduction compared to TCP backend, validated using fio test-suite.

Open Source Contributions:

- ntopng (Networking, C++) - submitted PRs to the packet processing software, improving the SYN Flood detection and Elasticsearch logging.

PUBLICATIONS

Designing Transport-Level Encryption for Datacenter Networks

May 2026

Tianyi Gao, Xinshu Ma, Suhas Narreddy, Eugenio Luo, Steven W.D. Chien, Michio Honda. IEEE Symposium on Security and Privacy (S&P).

Applied Networking Research Prize (IRTF), 2026

TECHNICAL SKILLS

Languages: C/C++, TypeScript/JavaScript, Go, SQL (Postgres), Lua, HTML/CSS

Frameworks: React, Node.js, Redux, ExpressJS, Go-chi, Flask, GraphQL

Developer Tools: Git, CMake, Docker, Kubernetes, Skaffold, Kaniko, Jenkins, Google Cloud Platform, NeoVim, GDB, ftrace, perf, eBPF