# Samrat Man Singh

#### Work

## Full Stack Software Engineer at <u>Vara</u>, Berlin, Germany, May 2021-May 2024

- **Consensus Conference**: extended mammography viewer to enable multiple radiologists to report on a mammography.
- **Supervision**: extended reporting UI to enable reports from newer radiologists in a clinic to be reviewed by senior radiologists.

## **Software Engineer Consultant at Nilenso**, Bangalore, India, January 2018-February 2021

I worked as a consultant in the **match-making team at Gojek**(ride-hailing company in South-East Asia), where I was involved with:

- **Multi-tenancy**: moving from deployment-per-country to having a single deployment serving traffic from multiple countries
- Publishing high-throughput, granular data using Kafka about driver allocation decision-making
- participated in the **on-call rotation**, responsible for the uptime of mission-critical services

## **Software Engineer at <u>Helpshift</u>**, Pune, India, February 2014-December 2015

- Wrote a system for triaging incoming customer support tickets based on user-defined filters.
- Wrote backend services for features to help customer service agents work faster.

### **Projects**

### Rust compiler contributions

- I've made a few minor contributions to the Rust compiler and toolchain.
- Improvements to suggestions made by Rustc: <a href="https://github.com/rust-lang/rust/pull/71617">https://github.com/rust-lang/rust/pull/71617</a>
- Contributed improvements to IO syscall handling in <u>Miri</u>(tool used for catching UB errors in unsafe Rust code blocks)

#### rug 2019

- A stripped-down implementation of Git that is "self-hosted"(ie. rug's source code is versioned using rug itself)
- Implemented in **Rust**

#### **rusl** 2017

- Syntactically similar to Scheme, and supports many of its high-level features such as closures.
- Features a linear-scan register allocator.
- Implemented in **Rust**

### **Blog**

#### Technical writing

- Contains some posts explaining technical topics
- Notable posts include <u>an article on disk-based hashtables</u> and <u>an article explaining external merge-sort</u>

#### Contact

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#### **Skills**

- Professional experience working with Clojure, Clojurescript, PostgreSQL, Git
- Have also used: Rust, Typescript, Python, Java, Elixir