

About me

I'm a backend engineer who strongly believes in engineering systems using first principles.

As co-founder, I've designed and built the backend of [CentralApp](#). I've also been mentor to several developers in my team.

Work Experience

Senior Software Engineer II (Haskell) *HubSpot, Belgium (March 2025 – January 2026)*

- Working with the Sync Engine team using Haskell, Java and Ruby
- Implemented an in-memory cache for Highway, a core component powering HubSpot's data sync
- Implemented global webhooks
- Implemented shared subscriptions
- Various fixes and additions to the Nix platform

CTO/Co-Founder *CentralApp (November 2014 – January 2025)*

- Designed and implemented a large scale backend system:
 - First implementation in Scala
 - Second implementation using Haskell

CentralApp is an existing business and the Haskell backend system now handles well over millions of requests per hour. It does so with an uptime SLA of almost 100%¹. The system is also designed to scale and fail safely, isolating failures to single components. Please refer to the [annex²](#) for more detail.

Various startups *India and Belgium, (2011 – 2014)*

Started my career in startups that were either scaling up, or completely experimental.

Education

Computer Science & Engineering *VIT, Vellore (June 2007 – July 2011)*

Thesis: Statistical Language models for Human to SQL translation

Technical Skills

Programming Languages

- Haskell
- Scala
- Erlang
- Java

Databases and Storage

- SQL databases
- Redis
- Various other schemaless systems

Misc

- Nix
- AWS (extensive)

For CentralApp, we hosted all our environments on AWS. The key components we used were:

- ECS for running service containers
- EC2
- SNS/SQS for integration across services
- S3 for storage (internal CDN system)

¹<http://status.centralapp.com/check/552165?timefilter=2160>

²<https://cv.asheshambasta.com/CentralappAnnex.pdf>

- RDS
- ElastiCache
- Load balancers (especially ALB and NLB)
- CloudFront
- IAM

Presentations

- Deep dive into Quasar: [CentralApp's API Gateway](#), KU Leuven, 2019³
- Haskell At CentralApp, Primis tech., 2024⁴
- FP Dag, KU Leuven, 2025⁵

Languages

- **English** (Native)
- **Hindi** (Native)
- **Dutch** (B1 level)

Hobbies and Interests

(Outside of Computer Science, which I also consider a hobby).

- [Photography](#)⁶
I love cameras and of late, I've taken a keen interest in film photography.
- [Music](#)⁷
I've always been fascinated with how electronic music is made — thus most of my experiments in music have come from recording and synthesizing sounds from scratch.
- Gardening
I admire the Japanese gardening philosophy. My wife and I have been trying to create the same in our garden.

³<https://centralapp.github.io/backend-technologies/talks/2019.12.09-kuleuven/>

⁴<https://asheshambasta.stackstorage.com/s/hOkY7xZ1mXo3CEZG>

⁵<https://asheshambasta.stackstorage.com/s/fpdag>

⁶<https://www.flickr.com/photos/asheshambasta>

⁷<https://soundcloud.com/asheshambasta>