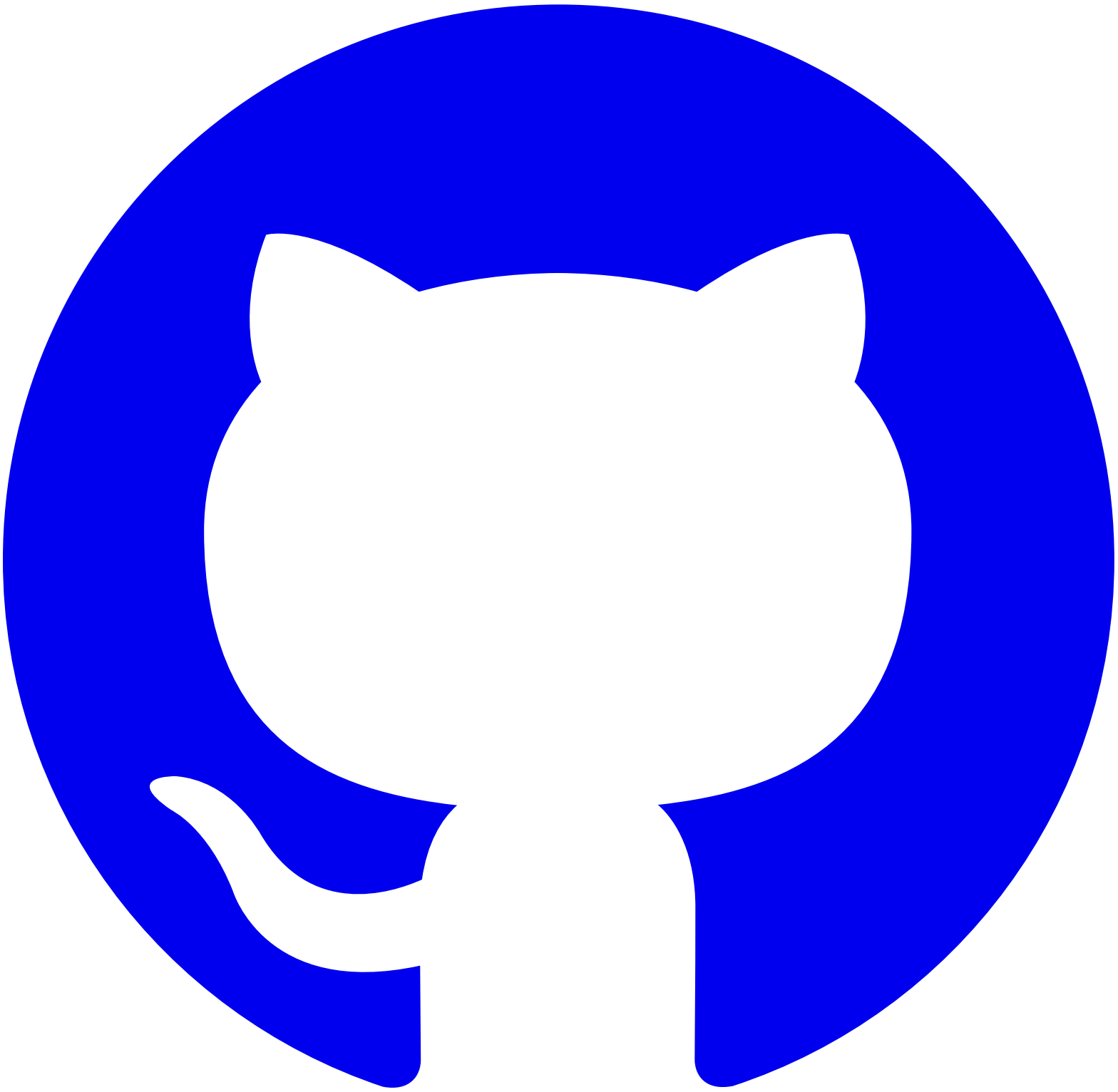
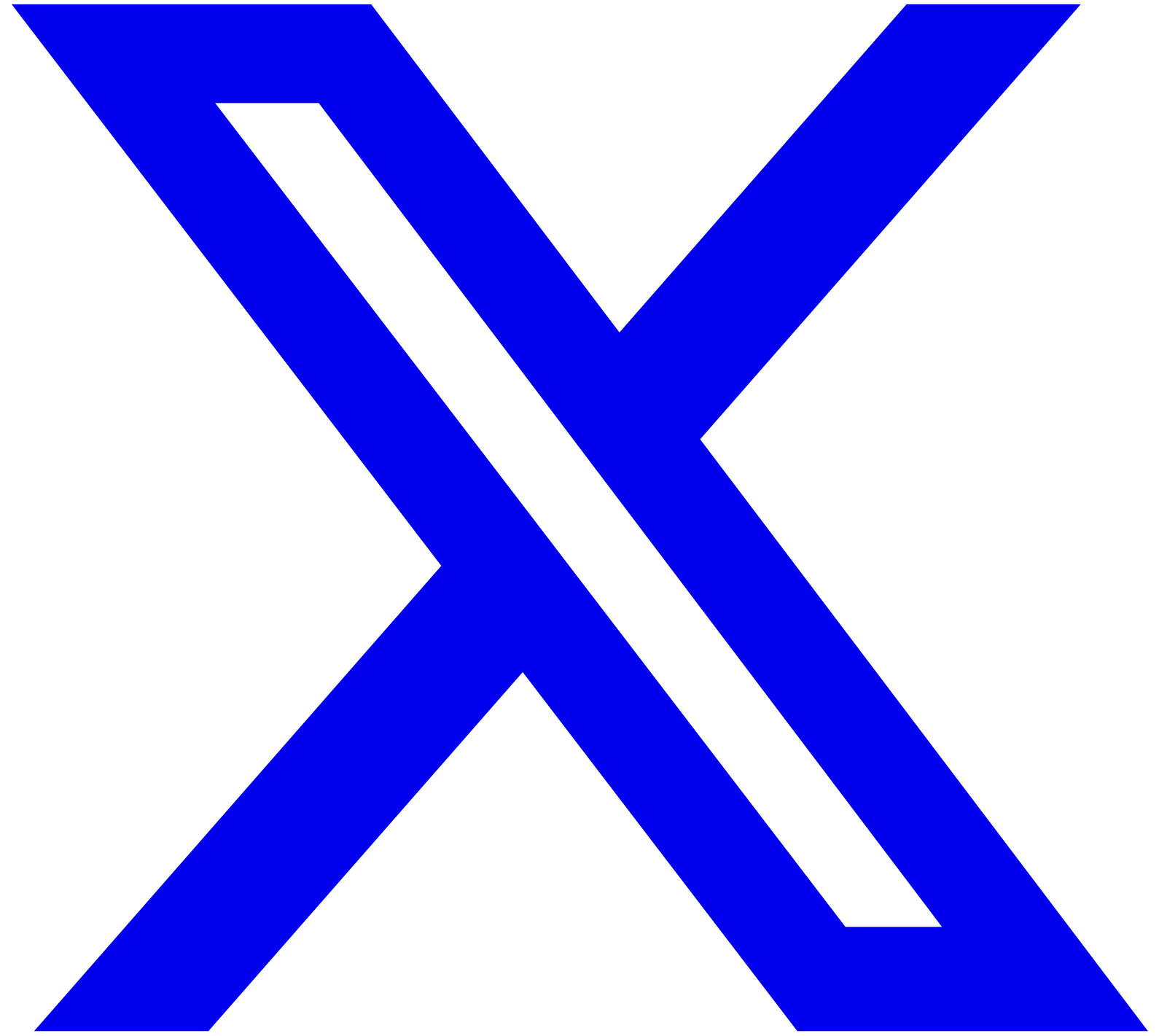
Shubham Kumar

Associate Lead Engineer

Bengaluru, India, IST





hello@shubhkumar.in+917406879845https://go.shubhkumar.in/site
SK

About

Associate Lead Software Engineer with 8+ years building scalable, high-availability backend systems for fintech and aviation. Specialized in cloud-native architecture, distributed systems, and microservices using Node.js, TypeScript, Haskell, and PureScript. Proven expertise optimizing system performance, reducing latency by 90%, and architecting mission-critical infrastructure for millions of users.

Work Experience

...

AirFi

2025 - Present

Associate Lead Engineer

Remote
Consultant

- Architected mission-critical LEO (Low Earth Orbit) connectivity system, collaborating across cross-functional teams to design scalable architecture enabling real-time, high-speed in-flight internet
- Spearheaded "Next Gen" hardware bring-up, modernizing software stack while preserving core system philosophies to ensure backward compatibility and future-proof performance

AirFi

2021 - 2025

Senior Software Engineer

Remote

- Engineered high-availability backend services using Node.js and TypeScript, increasing captive portal launch success rates from 50% to over 75% for global airline passengers
- Optimized ADS-B event communication and satellite email accessibility, ensuring reliable data synchronization for offline-first embedded systems in low-connectivity environments
- Architected versatile remote sync service that streamlined content distribution across diverse aircraft platforms, significantly reducing manual deployment overhead
- Enhanced offline payment applications by integrating online verification capabilities when internet connectivity is available
- Improved email accessibility via satellite, playing pivotal role in project success

Juspay

2018 - 2021

Software Developer

Onsite

- Revamped CRED payment backend using PureScript and Haskell, achieving 90% reduction in payout latency by slashing processing time from 60 seconds to 6 seconds
- Enabled seamless credit card transactions by refactoring transaction flows and reducing processing time at all stages
- Implemented generic fulfillment system for various financial operations, ensuring streamlined and efficient processing
- Integrated complex multi-bank payout providers and Bill Payment services (HP Gas) for GooglePay, enabling seamless transaction flows for millions of active users

Juspay

2017 - 2018

Software Developer Intern

Onsite

- Engineered high-performance RESTful crypto service to handle sensitive financial data, ensuring 100% data integrity for encryption and digital signing operations

Education

The Oxford College of Engineering, Bengaluru VTU

2013 - 2017
Bachelor of Engineering, Computer Science

Skills

tools

- Render
- Kubernetes
- Linux
- Digital Ocean
- FlyIO
- Supabase
- GNU Bash
- ZSH
- MacOS
- Heroku
- VS Code
- Docker
- TailwindCSS
- Netlify
- Neovim
- Amazon Web Services
- Google Cloud
- Elasticsearch
- Git

framework and runtime

- NestJS
- Express
- NextJs
- NodeJS

- Bun

programming language

- Purescript
- TypeScript
- JavaScript
- Haskell

databases

- Redis
- MySQL
- CouchDB
- MongoDB
- PostgreSQL

Specializations

Distributed Systems

High-Availability Architecture

Latency Optimization

Embedded Systems

- Distributed Systems
- High-Availability Architecture
- Latency Optimization
- Embedded Systems

Projects

f3v3r.in

f3v3r.in

Cybersecurity blog

Side Project
JavaScript
Markdown

hexo-twitter-auto-publish

github.comshubham399/hexo-twitter-auto-publish

A Hexo bot to auto tweets on Twitter for the blogs published via Hexo

Side Project
TypeScript
Node.js

urlshortner

github.comshubham399/urlshortner

A URL Shorter service

Side Project
TypeScript
Node.js

fly_db_backup

github.comshubham399/fly_db_backup

A tool to backup and restore Postgres database hosted on fly.io to cloudflare R2

Side Project
TypeScript
Python3

Discord Bot

github.comshubham399/discord-role-management-htb

A role management Discord Bot

Side Project
JavaScript
Node.js
WebSocket

Certifications

Cutshort Certified NodeJS (Node.js) - Basic

cutshort.iocertificate/103541

Cutshort

Cutshort Certified Algorithms - Basic

cutshort.iocertificate/103544

Cutshort

Google Cybersecurity Specialization

coursera.orgaccount/accomplishments/specialization/9FYU7RQDJGJ5

Google

Tools of the Trade: Linux and SQL

coursera.orgaccount/accomplishments/certificate/39DUG2G4S4UU

Google

Understanding CouchDB 3: Learn Basic & Advanced NoSQL Skills

ude.myUC-3e1c81c6-5f18-47a8-b801-61f298f02731

Udemy

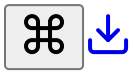
Bash Scripting and Shell Programming (Linux Command Line)

ude.myUC-80a8dd92-3c5e-4bdb-ab53-215d1e220f49

Udemy

Practical Ethical Hacking -The Complete Course

ude.myUC-6cb9287e-c316-47a7-b113-31f8e591bc0e/

Udemy

Press ⌘J to open the command menu