

# Vivek Kumar Agarwal

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Bangalore, India

I am a full-stack software developer with experience leading development at consumer and B2B startups. I bring a product mindset to my engineering work, creating value beyond the technical domain.

## Languages & Technologies

**Programming:** Python, JavaScript, TypeScript, Node.js, HTML, CSS, Django, React.js, Next.js, React Native, GraphQL

**Dev-ops:** Docker, Ansible, AWS, Debian/Ubuntu, Caprover

**Data:** PostgreSQL, CockroachDB, Cassandra, MongoDB, Redis, RabbitMQ

**Other:** WebRTC, REST API Design, Micro-services, X.509, Web Scraping, SEO

## Work Experience

### CO-FOUNDER & CTO, SOCIA – 2021 - 2022

- Co-founded a studio where we build utility tool websites and grow them organically, through SEO.
- Shipped a React Native application on Play Store single-handedly in a month during the initial phase of the company (including reverse engineering social media platform APIs) along with multiple Next.js websites.
- Built and managed a team of four developers to work on several projects in parallel (websites, react native apps, android native apps).
- Figured out strategies to rank on Google for our target keywords and achieved 2M+ organic users per month on one of our products.
- Setup processes for keyword and industry research for further pipeline of products.
- Technologies: TypeScript, Node.js, React.js, Next.js, React-Native, Tailwind, Django, PostgreSQL, MongoDB, Redis, Docker, Caprover, SEO

### FULL STACK ENGINEER (CONTRACT), UPLIFT – 2020 - 2021

- Worked as a full stack engineer as a contractor with clients (Sugar Living, Journey) through the agency.
- Collaborated with existing team of developers working on a React Native app and GraphQL based backed.
- Developed a chrome extension to record screen & tabs (à la Loom), helped cleanup and added tests to an existing codebase; developed and maintained several features for Journey.
- Technologies: TypeScript, Node.js, React.js, Python, Flask, Tailwind, PostgreSQL, AWS, Chrome Extension APIs, WebRTC

### ARCHITECT & LEAD ENGINEER, TRUSTCOR CERTIFICATE AUTHORITY, TRUSTCOR SYSTEMS – 2019 - 2020

- Architected the B2B PKI platform comprised of over fifteen micro-services while ensuring compliances for the security, regulatory & audit requirements and scalability, high availability & long term maintenance as the focus
- Wrote majority of the services on the platform in Python – mixture of Flask based REST APIs and worker services, communicating with each other via API calls and message queues – allowing failures of different parts of the platform and having automated business logic flow recovery mechanisms in place
- Ensured high level of test coverage and documentation for internal codebase & customer facing API endpoints
- Setup development environment using Docker to make it easy to develop with and test several services at once
- Wrote Ansible playbooks for bare metal production deployment and leveraged it for testing to bring up the entire platform on AWS within minutes
- **Technologies:** Python, Flask, CockroachDB/PostgreSQL, Apache Artemis, Redis, X.509, REST API design, Swagger, Microservices, Docker, Ansible, AWS

#### **SENIOR SOFTWARE ENGINEER, MSGSAFE, TRUSTCOR SYSTEMS – 2018 - 2019**

- Led the team of 5 developers on the frontend, working on the MsgSafe's React.js and React Native apps
- Implemented real time peer to peer encrypted cross-platform audio and video calls using WebRTC
- Maintained and improved existing Websocket based text chat service
- Migrated legacy Python 2 Flask based REST API and other backend services to Python 3, along with bug fixes and performance improvement
- Assisted management with hiring interviews and on-boarding developers on the team
- **Technologies:** Python, Flask, PostgreSQL, Cassandra, RabbitMQ, Javascript, HTML, CSS/SASS, React.js, React-Native, Redux, Websockets, WebRTC

#### **SOFTWARE ENGINEER, MSGSAFE, TRUSTCOR SYSTEMS – 2016 - 2017**

- Rewrote the MsgSafe's web application (encrypted email client) from scratch in React.js with full mobile support and went to production within four months
- Built the iOS & Android clients using React Native from scratch, sharing code with existing React.js web app
- Created the marketing website (responsive) with better user experience over the existing one
- Wrote a library to manage text translations for existing Flask & React based apps and integrated it with a translation service to automate the process
- **Technologies:** Python, Javascript, HTML, CSS/SASS, React.js, React-Native, Redux

#### **FULL STACK ENGINEER, CHALLENG – 2014 - 2016**

- Collaborated on the product idea and the technology research & planning
- Developed scalable backend for the platform along with React.js based responsive webapp from scratch
- Wrote Scrapy spiders for scraping several websites to extract data for lead generation
- **Technologies:** Python, Flask, PostgreSQL, HTML, CSS/SASS, Javascript, React.js, Scrapy, Celery, Heroku

#### **FULL STACK ENGINEER, HALLWAYS – 2014**

- Took ownership of the existing codebase, improved it with industry standard conventions and security practices
- Optimised frontend for better performance and rankings on the search engines and developed new features
- Wrote scrapers to collect relevant data from various websites
- Developed & published Android & iOS mobile apps using Phonegap framework
- **Technologies:** Python, Flask, PostgreSQL, HTML, CSS, Javascript, jQuery, Phonegap, Celery, Heroku

#### **CO-FOUNDER & DEVELOPER, AAMARCITY.COM – 2013 - 2014**

- Market research and business idea validation with MVP; designed and developed the entire website
- Generated traffic via SEO and social media marketing – organised several competitions to engage users
- **Technologies:** Python, Flask, MongoDB, HTML, CSS, Bootstrap, Javascript, jQuery, Ubuntu

#### **SELF-EMPLOYED – 2010 - 2013**

- Developed & managed Facebook Apps with over 100k daily active users, monetised with CPA offers from several ad networks
- Built niche websites and optimised them to rank on first page of search engines for keywords with high search volume, receiving millions of visitors per month; monetised using Google AdSense & other networks
- **Technologies:** PHP, MySQL, Wordpress, Facebook Graph API, SEO