

# Sid Verma

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I have a decade of experience as a full-stack engineer, manager, and educator. I've worked with organizations in deep-tech, finance, education, eCommerce, media, academia, and more. I excel in **rapid prototyping, system design, workflow automation**, and **functional UX development**. I also enjoy writing technical documentation.

## Skills

### Full-stack development, DevOps, Team Management

- Backend: **Golang, Python, Javascript**.  
Most used frameworks: **Django, Flask** and **Express.js**.  
Frontend: **React, Vue.js**  
Also a big fan of simple, structured **HTML/CSS** with **vanilla JS**. Example: this webpage.  
I also like building infrastructure.
- Bare metal deployments using SSH and **Ansible**, on-prem and off-site.
  - Containerized deployments on bare metal + VPSs, managed using **Docker, Kubernetes** and **Terraform**.
  - Hosted kubernetes and other services on **AWS, GCP, DigitalOcean**, and **OpenStack**.

## Experience

### March (2024-Present)

(**Consulting CTO**). Guiding development roadmap and strategy, reducing tech debt, building resilient and stable tech.

### Opencraft (2020-21, 2023-24)

- Worked extensively with [OpenEdx](#) at this **fully remote** and **distributed** consultancy, focusing on core platform development, deployment, client management, and process improvement.
- **Collaboration**: Worked with open-source maintainers and clients to develop effective and versatile solutions, compatible with client needs and community requirements.
  - **Recruitment**: Led screening, interviewing, and onboarding processes.
  - **Process Improvement**: Identified and resolved issues in communication, project planning, and team productivity.
- Developed frameworks for better planning.
- **Sprint planning**: Enhanced team productivity and communication by developing bespoke tools for planning and monitoring.
  - **Software development**: Architected and developed the core platform, including plugins and orchestration. Most of it in Python, Django, React and Golang.
  - **Cloud-agnostic Infrastructure management**: Built tools and platforms to manage client infrastructure (cloud/bare-metal) using Ansible, Terraform, Kubernetes, OpenStack, AWS, GCP, and DO.

### Shortform (2021-22) , Solar Accounts (2020-21)

- **Wrote API backends**: Wrote verbose REST APIs in Python and Node.js.
- **Built Vue.js apps**: Transformed design mockups into functional Vue.js applications.
- **Infrastructure**: Improved the availability, cost and resilience of the AWS infrastructure.
- **Enhanced security**: Integrated end-to-end encryption to secure accounting software.

### McLaren College (2020-21)

- **Course development**: Developed courses on Programming, Web Development, Dart, and JavaScript.
- **Classroom**: Instructed beginner software developers in these subjects.
- **Coding**: Built web-based tools for managing multiple concurrent classrooms.
- **Workflow optimization**: Developed efficient backend workflows for scoring, grading, and feedback.

### Tower Research Capital (2017-19)

- My team built tools to manage the highly complex infrastructure. I worked on, among other things:
- **Monitoring System**: Developed an accessible monitoring and alerting system with robust data security for all teams and systems.
  - **Orchestration System**: Developed an internal platform to easily provision different kind of systems (Something like an in-house EC2).
  - **Infrastructure Visualization**: Led development of tools for comprehensive visualization of company's physical and logical infrastructure.
  - **Automation Framework**: Redesigned the central automation framework making it more generic and extensible, allowing automation of software operations and organizational processes.
  - **Process optimization**: Developed new services and automations to speed up organizational processes, eliminating redundant authorizations and reducing wait times.
  - **Performance improvements**: Optimized core platform services and APIs for significant performance gains (2x - 10x times reduction in response times).
  - **Full-stack & Infra Development**: Built features for various other internal organizational products and microservices, many from scratch. Core tech included - Python, Go, Java, C++, Vue.js, SQL, Neo4J, Kafka, Elastic, Docker

### Hello English (2015-17)

- Some other skills I use as a hobbyist:
- Kotlin, Swift, Rust, C++, SonicPi** for mobile apps, tinkering, microcontrollers, and music.
- Audacity, Blender, Davinci Resolve, Adobe Suite** for A/V production.
- OpenSCAD, Autodesk Fusion** for 3D modeling and printing.

- OpenEdx is an open-source education platform that enables anyone to spin up their own [edX](#) like instances.
- It's a large platform with tons of capabilities. We provided the platform as a managed service, developed custom solutions for clients small and large, and worked closely with the open source community and maintainers to add new capabilities to the platform.
- [Here](#) is an example of some of my open source work.

- My team developed software to manage and secure the global trading infrastructure at this [High-Frequency Trading](#) firm.
- We built tools for provisioning, monitoring, and debugging different kinds of systems, applications, and networks – ensuring seamless collaboration and customizable access across trading and operations teams worldwide, often with very complex Access Control.

- **Social news feed:** Designed and built a highly cost-efficient and fast social news-feed for the company's **50M+** users.
- **Chatbot platform:** Developed a chatbot platform and a user-friendly templating language for writing interactive stories, to teach foreign languages.
- **Speech recognition:** Built a multi-platform, on-device speech recognition and grading system for servers, web-browsers, and mobile.
- **CI/CD:** Introduced automation pipelines for testing, deployment, and rollbacks across all apps and services.
- **Electron app + PWA:** Created a framework to build an offline electron app, and a PWA from an existing dynamic website. This allowed the web-app to be packaged for running locally.
- Wrote **data aggregation services, browser extensions, IVR platforms,** and several **Android** modules.

**Tickertape (2015-16)**

- Developed the main product, Stock Screener from scratch using **Node.js** and **AngularJS**; now serving **200K+** users.
- Designed intuitive **UI** and engineered **backend, frontend,** and **data pipelines.**
- Created **internal libraries** for seamless REST and SOAP API integration from external vendors.

**Education**

**Jaypee University of Engineering and Technology (2012-16)**

B.Tech, Computer Science and Engineering

I was the **sole developer** of the initial version of this product. I designed a functional UI in half a day, followed by months of coding.

Like the Ship of Theseus, most code I wrote has likely been cycled out. And yet, the UI still survives, almost exactly the same.

I am simultaneously annoyed and proud of this, given that I am *not* a professional UX designer.