Sidd Gupta

Full Stack Developer

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Engineering Leader & Full Stack Developer with 10+ years of experience delivering high-quality, user-focused software. Proven track record of leading cross-functional teams, architecting scalable systems, and driving impactful product enhancements from concept to launch. Skilled at uniting engineering, product, and design to build cohesive, innovative solutions.

Skills

Frontend: TypeScript, JavaScript, HTML5, CSS, SASS, SCSS, React, Redux Toolkit, Angular, Material UI, i18next, Storybook, Webpack, Vite, Yarn, npm, Figma

Backend: Python, C#, C++, C, PHP, SQL, GraphQL, JSON, XML, Django, Node.js, Microsoft SQL Server (MSSQL)

Cloud & CI/CD: AWS, Microsoft Azure, GCP, Docker, Kubernetes, GitLab CI/CD, GitHub Actions, TeamCity

Testing: Jest, React Testing Library

Developer Tools & Workflow: VS Code, Visual Studio, Git, Jira, ConfigCat

Work Experience

Xcellent Technology Solutions

Modernized client facing HydroAdd3D SPA and updated backend infrastructure for the same.

Software Engineer - HydroAdd3D   Nov 2024 **-** Present

- Upgraded core app framework to meet modern security and usability standards.
- Collaborated on app usability with design, and implemented them using **React, GraphQL** and **Material UI.**
- Enhanced performance by 15% via improvements to the **Django** backend.
- Migrated from **Create-React-App** to **Vite**, and updated the build process in **GitLab CI/CD.**

MakeMusic, Inc

Adapted to major technology pivots while focusing on improving software architecture and processes, enabling the team's ability to deliver better products.

Software Engineer - Finale, Compose, and Sight Reading Studio   Apr 2021**-** Aug 2024

- Led cross-functional teams as Technical Lead, driving the implementation of key product enhancements and improving user interface components.
- Upgraded Compose and Sight Reading Studio from Ember.js to **React** with **Redux Toolkit** in **TypeScript.**
- Evaluated the scope, risk, and feasibility of new features in collaboration with the Product Manager to ensure successful implementation that benefited 5,000+ active monthly users.
- Collaborated with the Product Designer to develop and integrate effective, accessible, and user-friendly **UI solutions**, resulting in a 10% increase in user engagement.
- Architected app-wide systems, including a localization framework, a user notification system, and a robust error handling solution for critical failures.
- Implemented reusable components to an organization-wide **design system**.
- Defined and revised **REST API**s for integrating with MusicArchitect, our in-house music notation engine, reducing integration time by 20%, benefiting both internal and external partners.
- Refined a 30+ year-old **C++** codebase for Finale, reducing the amount of legacy code by 10%, and improving performance by 18%.
- Owned and documented the process for product updates which was managed via **AWS**, coordinating with 3rd party vendors to ensure timely global releases.

Energy & Geoscience Institute

Sole developer responsible for processing massive amounts of raw data and delivered digestible results that enabled institute-critical research by petroleum geologists.

Lead Software Developer - [iCORDS](#) and [EGIConnect](#)   Nov 2019 - Oct 2020

- Improved internal infrastructure to better survive catastrophic failures by replacing a monolithic on-premises server with a **Docker + Kubernetes** based solution to enhance reliability.
- Assessed the OSDU platform, a data sharing platform built specifically for the energy sector, and adapted iCORDS functionality into it.
- Migrated critical **SQL** functions to a **JSON** file-based system on **AWS**, improving data retrieval times by 30% for end-users.

Software Developer - iCORDS   May 2016 - Nov 2019

- Managed and processed data from 30,000+ offshore wells, with 2,500+ data types, for an international research community of over 200 users via **SQL.**
- Optimized **Microsoft Azure SQL Database**, increasing query performance by 15%.
- Utilized end user feedback to identify and implement features and fixes, in **C#** and **JavaScript/AngularJS.**

Tiered World Studios

Built SPAs to aid low-income Hispanic families make educated lifestyle choices.

Lead Engineer - Untitled Recipe Game and Padre a Padre   Sep 2015 - May 2016

- Created app framework using **C#** in the **Unity** engine for an unreleased **mobile AR** recipe game.
- Developed and iterated on **SPA** infrastructure for Padre a Padre.
- Collaborated on design challenges and risk mitigation strategies with interdisciplinary teams.

Retro Yeti Games

Using new, cutting edge game engine tech, developed a game from prototype to full release on Steam.

Lead Engineer - [404Sight](#)   May 2014 - May 2015

- Optimized final product with a total reduced game size of 90% and large increase in performance within **Unreal Engine 4** by iterating on the basic building blocks used throughout.
- Integrated **Valve Steamworks SDK** with Unreal Engine 4.
- Led a team of engineers through the use of consistent code workflows and reviews.

Gameplay Engineer - 404Sight   Jan 2014 - May 2014

- Established pipeline/workflow for the team in **Unreal Engine 4**, and engaged with the community during the first year of the engine's availability.
- Collaborated with creative leads to implement and iterate core gameplay features.
- Implemented data analytics system to allow design to analyze issues or improvements to user experience.

Personal Projects

AI Behaviors   Aug 2014 - Dec 2014

Experimented with multiple **AI** algorithms in **Unity**:

- **Reynold's steering behaviors**, for autonomous movement.
- A **minimax algorithm** using AI, for a game of Tic-tac-toe.
- Bot driven capture the flag that has AI driven by **behavior trees** and **finite state machines.**
- A **genetic algorithm** to enable bots to get better at navigating to and collecting points.

Education

University of Utah   Aug 2013 - May 2015

Master of Science in Computing - Entertainment Arts and Engineering