

Nishkal Kashyap

Mechanical Engineer turned full-stack developer. Creator of JavaScript platform [QuarkJS.io](#)
Visit my portfolio website at: [nishkal.in](#)

+91-7626865267

hello@nishkal.in

[nishkal.in](#)

github.com/nishkalkashyap

[linkedin.com/in/nishkalkashyap](https://www.linkedin.com/in/nishkalkashyap)

Experience

EdFora Infotech Pvt Ltd

November 2019 - Present

Currently leading a team of 6 developers and I work majorly as Full stack developer.

Tech Stack: Angular 4 • Cloudflare • AWS • EC2 • Lambda Functions

- **Implemented Cloudflare CDN over existing infrastructure** - Migrated an entire application from EC2 server based hosting to static S3 bucket hosting on top of Cloudflare's content delivery network with a lambda function as a proxy in between. This architecture massively improved website performance (ttfb, first contentful paint, DOM load e.t.c) and saved company a fortune.

Tech Stack: Vue.js • S3 • Cloudflare • JAM Stack

- **Created Documentation website** - Took initiative and built company's internal documentation website and documented various frontend and backend development processes/ architecture. The website is made using JAM stack with frontend on a static build with Vue.js.

Quark

July 2018 - Present

My first entrepreneurial undertaking [QuarkJS.io](#), a full fledged application development and distribution platform for Windows, Mac and Linux based operating systems. Released in August 2019, the project website has been viewed over 125,000 times and the Quark software itself has been downloaded by over 10,000 developers around the world. This project is also a beneficiary of the Google Cloud Startup Program!

Tech Stack: Electron.js • Angular 7 • Node.js • Webpack • 2018 - Present

- **Quark development environment** - Developed a cross-platform, integrated development environment powered by the same code editor as of **Microsoft's Visual Studio Code (VSCode)**. The IDE boasts of features like integrated terminal, inbuilt package manager and more than 150 different configuration settings. Visit [quarkjs.io](#)

Tech Stack: React.js • Firebase • Firestore DB • Cloud Functions

- **Quark app store** - Currently under active development, the appstore is a full-fledged application distribution platform for Quark apps. It supports novel features like release versioning, application auto updates, register user ratings e.t.c Visit [dash.quarkjs.io](#)

Team Defianz Racing

February 2015 - July 2018

Team Defianz racing is a Formula Student initiative at Delhi Technological University. Participated in 4 Formula Student events held in India and the United Kingdom across 4 years. Led a team of 25 student engineers to its best positions till date at both FS Bharat (2nd overall) and FS United Kingdom. Previously worked as the head of the Powertrain and Electronics department.

Universal Industries

Dec 2015

Worked as an intern with the design department of Universal Industries, which is a renowned manufacturer of a wide range of mechanical power transmission products. Developed CAD models for pulleys and sprockets on SolidWorks. Studied the Quality Control processes implemented by the company.

Education

Delhi Technological University

Aug 2014 - Jun 2018

B. Tech, Mechanical Engineering • 70.4%

Shivalik Public School

Mar 2012 - May 2014

CBSE • 94.6%

Projects, Competitions and Achievements

Competition • India • Coimbatore • Kari Motor Speedway

Formula Student Bharat

Jan 2018, Team Defianz Racing

Led a team of 25 student engineers to an overall **second position** in the Formula Student Bharat competition. Responsible for systems integration and team management.

Tech Stack: Firebase Firestore • Ionic 3 • Angular 4 • August 2017

- **Finance Management App** - Developed a finance management app using Ionic 3, Angular 4 at the frontend and Firebase Firestore at the backend. The app was used by a team of 25 student engineers from Aug 2017 - Jul 2018 ,to manage internal finances of the team.

Tech Stack: Arduino • Processing • March 2017

- **Data acquisition system** - Implemented a data acquisition system using Arduino, supporting more than 20 different sensor inputs. The data is sent in real time via a radio transmitter mounted on the car and received on the client side via a receiver connected to a laptop.

Competition • United Kingdom • Silverstone Formula 1 Circuit

Formula Student UK

July 2017, Team Defianz Racing

Participated in the Formula Student UK competition held at the Silverstone Formula 1 track. Responsible for the development of the combustion powertrain and electronics of the vehicle.

Arduino • Nextion HMI display • Carbon fiber • Pneumatics • February 2017

- **Electronic steering wheel** - Developed a carbon fiber reinforced, touch screen enabled electronic steering wheel. Built with Arduino and Nextion HMI display, the steering wheel served as the central command center for a formula student vehicle.

Solidworks • Research Paper • Thesis • Aug 2016 - May 2018

- **Variable geometry intake manifold** - Developed a variable geometry intake manifold. This system massively improved the overall performance of an IC engine, mainly throttle response at the bottom end of the RPM range.

Competition • United Kingdom • Silverstone Formula 1 Circuit

Formula Student UK

July 2016, Team Defianz Racing

Participated in the Formula Student UK competition held at the Silverstone Formula 1 track as a powertrain engineer.

Competition • India • Buddha International Circuit

Formula Student India

Jan 2016, Team Defianz Racing

Participated in the Formula Student India competition held at the Buddha International Circuit as a junior powertrain engineer.

Skills

Programming Languages	JavaScript, TypeScript
Frontend technologies	Electron.js, Angular 2+, Vue.js, React.js, Babel, Webpack, SCSS/CSS, HTML
Backend technologies	Node.js, Express.js, Cloud Functions, App Engine, heroku
Databases	Firebase Database, Firebase Firestore
DevOps	Travis CI and Appveyor CI
Cloud Service Providers	Amazon Web Services (AWS), Google Cloud Platform (GCP), Cloudflare
Electronics & MCU's	Arduino based boards, Node MCU, ESP, Nextion HMI display, OBD-2 (ELM-327)
Core Engineering	Solidworks, IC Engines, Automobile electronics, Manufacturing processes

[Learn more about me on my website nishkal.in](#)