



Contact

☎ 353 894431527
✉ arvind.007as@gmail.com
📍 Cork, Ireland

Websites



Education

SEP 2023 - SEP 2024

MSc Interactive Media

University College Cork
First Class Honours (79.4%)

JUN 2014 - AUG 2018

B.E Electrical and Electronics Engineering

Anna University / Valliammai Engineering College
First Class (CGPA: 6.96)

Employment

SEP 2024 - PRESENT

Laboratory Demonstrator
University College Cork

MAY 2022 - AUG 2023

Custom Software Engineering Analyst
Accenture

OCT 2018 - MAY 2022

Technology Analyst
Infosys Limited

Skills

- **Languages:** JavaScript (ES6+), TypeScript, HTML5, CSS3, Swift, Python
- **Web Frontend:** React, SASS, JSS, jQuery, Bootstrap, Material UI, Tanstack Query, Storybook, PWA, three.js, R3F, Zod
- **Web Backend:** Node.js, Express.js
- **Mobile:** iOS Application development (Swift)
- **State Management:** Zustand, Redux
- **Testing:** Playwright, Jest, Vitest
- **Databases:** MongoDB, MySQL
- **Methodologies:** Agile, Waterfall, ITIL
- **Design:** Adobe Illustrator, Photoshop, Blender

Arvind Krishna Gopalan

Software Developer

A skilled Software Developer with nearly five years of experience specializing in the development and maintenance of mobile and web applications. Proficient in web and iOS app development as well as IT service management, with a strong track record of delivering high-quality solutions. Eager to join a dynamic organization where I can leverage my expertise to drive growth and innovation while contributing to impactful projects.

Academic and Personal Projects

Visual Array Test

Three.js, Virtual Reality

Assisted Mr. Vincent Russel, a PhD student at University College Cork, in developing a Visual Array Experiment using three.js for his research on the benefits of spatial audio in virtual reality learning experiences, under the supervision of Mr. David Murphy, Lecturer and Programme Coordinator for the MSc in Interactive Media

Link: [Visual Array Test \(https://cs1.ucc.ie/~akg2/Experiment3/\)](https://cs1.ucc.ie/~akg2/Experiment3/)

Beyond the Boundary

React Three fibre, Augmented Reality

Developed Beyond the Boundary, a Progressive Web XR app using React and Three.js for a master's dissertation, designed to enhance cricket viewing by overcoming limitations of traditional broadcasts. This app provides a customizable, immersive experience tailored to the user's device capabilities, with optimized interfaces for desktop, mobile, and AR headsets. It integrates real-time stats and allows users to select, arrange, and interact with game data in a flexible layout, addressing the common lack of detailed, accessible insights in standard broadcasts. By leveraging libraries like @use-gesture/react, Chart.js, and Tailwind CSS, Beyond the Boundary offers a responsive, interactive platform that brings cricket fans closer to the game.

Link: [Beyond The Boundary \(https://beyond-the-boundary.onrender.com/\)](https://beyond-the-boundary.onrender.com/)

Shades

React.js

Built a React-based color picker application that enables users to select colors in RGB, RGBA, and HEX formats and create custom color palettes. It was built with the help of libraries like Chroma.js for color manipulation, react-sortable-hoc for drag-and-drop palette sorting, and react-copy-to-clipboard for easy copying of color values, along with several other supporting libraries.

Link: [Shades \(https://shades-ak.onrender.com\)](https://shades-ak.onrender.com)

Super Mario

Javascript, HTML 5 Canvas

Recreated classic Super Mario game using HTML5 Canvas API and JavaScript

Link: [Super Mario \(https://super-mario-9gp1.onrender.com\)](https://super-mario-9gp1.onrender.com)

Fists of fury

Three.js, Virtual Reality

"Fists of Fury" is a web app created with three.js and WebGL, that lets users reserve seats for robotic boxing tournaments. It offers an immersive, interactive experience by allowing users to navigate a virtual venue and book seats through a realistic 3D simulation.

Link: [Fists of fury \(https://cs1.ucc.ie/~akg2/labs/CS6105/assignment/src/\)](https://cs1.ucc.ie/~akg2/labs/CS6105/assignment/src/)

Infogram

React.js, Material UI

Built a React-based portfolio project with Material UI, mimicking Instagram's profile page. The application is available in two themes with the capability of persisting user's preference to local storage

Link: [Infogram \(https://infogram.onrender.com\)](https://infogram.onrender.com)

Analytical Evaluation of ASOS.com

UX Case Study

Conducted a UX evaluation to assess the accessibility and usability of ASOS, a major British online retailer specializing in fast fashion and cosmetics. This study examined the website's alignment with Nielsen's 10 Usability Heuristics and evaluated its accessibility

- **Other:** MS Office, Service Now, Azure DevOps

Certifications

Udemy Certified Full Stack web developer

Infosys Certified Front-end Developer

Publications

Theft Detection using IOT in

Automated Toll Plaza

International Journal of Advance

Research and Development

through the Wave.webaim tool to pinpoint potential issues that could impact user experience. Based on the findings, a redesign of the ASOS website was proposed to address identified usability and accessibility shortcomings, with the goal of creating a more inclusive and user-friendly platform.

Link: [Analytical evaluation of ASOS.com \(https://github.com/Akshark1075/Analytical-Evaluation-of-ASOS.com/blob/main/report.pdf\)](https://github.com/Akshark1075/Analytical-Evaluation-of-ASOS.com/blob/main/report.pdf)

Doodle Haven

Processing

Developed a processing sketch that generates fractal patterns with customisable parameters, allowing users to overlay them with their own hand-drawn creations

Link: [Doodle Haven \(https://github.com/Akshark1075/doodleHaven\)](https://github.com/Akshark1075/doodleHaven)

CSK

iOS (Swift)

Developed a multi-user iOS app for creating dream teams by dynamically rearranging table rows, with selections saved in Core Data for easy access via the favourites option.

Link: [CSK \(https://github.com/Akshark1075/csk\)](https://github.com/Akshark1075/csk)

Fractal Generator

Python

Developed a Python-based application that utilizes the Turtle and Tkinter libraries to create a variety of fractals.

Link: [Fractal Generator \(https://github.com/Akshark1075/fractal_generator\)](https://github.com/Akshark1075/fractal_generator)

RPU FPL

HTML, CSS, JS, Node.js, Mongo db

Created a fantasy football league website using HTML, CSS, and JavaScript, incorporating libraries like Bootstrap, EJS, MongoDB, Express, and Node.js. The application supports a multi-user environment with user authentication implemented through Passport.js, allowing secure and personalized access for each participant.

Link: [RPU FC \(https://rpu-fpl.onrender.com\)](https://rpu-fpl.onrender.com)

D!rt2Shine

HTML, CSS, JS, Node.js, Mongo db

Developed a car wash booking website that allows users to explore various wash packages and book a time slot. The application utilizes Passport for authentication, EJS for templating, Express.js, and Mongoose for data management, with Nodemailer handling booking confirmations and password reset functionalities.

Link: [D!rt2Shine \(https://dirt2shine-ak.onrender.com\)](https://dirt2shine-ak.onrender.com)

2048

HTML, CSS, JS

Recreated 2048 game using Vanilla Javascript. The application accepts keyboard inputs for moving the blocks to make up a sum of 2048

Link: [2048\(https://two048-game-bow9.onrender.com\)](https://two048-game-bow9.onrender.com)

Lights Out

React.js

Recreated the Lights Out game using React.js, featuring a grid of randomly lit blocks. When a player clicks a lit block, it toggles off while simultaneously toggling the surrounding blocks on or off. The objective is to strategically click blocks to turn off all lights on the grid.

Link: [Lights Out \(https://lights-out-react.onrender.com\)](https://lights-out-react.onrender.com)

Hangman

React.js

Recreated classic Hangman game using React.js

Link: [Hangman \(https://hangman-game-ak.onrender.com\)](https://hangman-game-ak.onrender.com)

Yahtzee

React.js

Recreated Yahtzee game using React.js

Link: [Yahtzee \(https://yahtzee-ak.onrender.com\)](https://yahtzee-ak.onrender.com)

RPU Auction

HTML, CSS, JS

Developed an auction-based system for selecting random teams using Javascript

Link: [RPU Auction \(https://rpu-auction-ak.onrender.com\)](https://rpu-auction-ak.onrender.com)