

Professional Summary

Versatile software engineer with 12 years experience in developing software/embedded products for various government/private organisations. My career mission has been to work with thriving people/organisations to make software products that help people lead better lives.

Experience

Centre for Development of Advanced Computing (Chennai) *Nov 2008 - Present*

Principal Engineer

Jan 2016 – Present

- Developed a portal for monitoring candidate behaviour, anomaly detection and centre delay in near-realtime during CAT exam. Client: Indian Air Force, Utilised: MEAN Stack.
- Built a web platform that enables NBA to perform regulatory functions against any non-compliance. Developed patent/journals search & filter system, e-filing reviewer and visualisations & maps for taxonomy. Client: National Biodiversity Authority.
- Designed & implemented front ends of SCRB portal. It has accused search & filter, timelines, crimes trends visualisations. Utilised: jQuery, VueJS, ChartJS.
- Created a wrapper for Imapsync (perl) to migrate mails from Gmail to CUTN servers.
- Implemented front ends for covid19 dashboard. Utilised: Leaflet, Bhuvan Maps, jQuery.
- Customised ReactJs modules for a maritime ship tracking software.

Senior Engineer

Jan 2012 - Jan 2016

- Implemented new features in CDAC's Project Accounting System. Utilised: AngularJS.
- Developed a dashboard for Greater Chennai Corporation. It has grievance redressal, revenue, ambulance tracking & air quality modules. Utilised: ExpressJs, Charts.
- Overhauled poorly designed user interfaces of a Mess Management System (Navodaya School), designed wireframes & implemented pages in HTML/CSS.
- Developed the ethernet/WiFi interface of Smart plug. It is an IoT device that tracks electrical parameters for a target environment. Implemented a scheduler. Utilised: avr-gcc, Java, RN171, Atmega2560/328, W5100. Deployed at HPC Facilities, Pune.

Engineer

Nov 2008 - Jan 2012

- Worked on a research project called Instrument bed. It aims at unobtrusive monitoring of respiratory signals & pulse using high sensitive load cells.
- Designed dimmable ballasts for CFLs & LED drivers for LEDs. Utilised CADSTAR

Personal Works

- As a hobbyist programmer, I try to make useful things. Below are some. More at my [site](https://arunkumarv.github.io).
- Context-Aware Framework - Java RMI, Malayalam dictionary - Flask & SQLAlchemy, Browser extensions for Malayalam dictionary - JavaScript, A basic scheduler for AVR.

Education

University of Kerala, Amrita Vishwa Vidyapeetham, Kollam **2003 - 2007**

Electronics & Communications (GPA: 6.56), Project: Encrypted wireless walkie talkie.

ER&DC, CDAC, Trivandrum, Kerala **2008 (6 months)**

PG Diploma in Embedded System Design (82.83%), Subjects: Data Structures, C, AVR, Algorithms.

Model Technical Higher Secondary School, Kaprassery, Kerala **1998 - 2003**

Subject: Electronics, Electrical, C, BASIC, FORTRAN,

Matriculation (THSLC): 72.5%, HSE(Plus Two): 71%

Languages

JavaScript, C, Python,
PHP, HTML, SQL, Dart,
Java

Frameworks

Angular, Express.js,
Node.js, Flutter, Hapi.js,
jQuery, Flask

Concepts

Object Oriented Design &
Development, Entity
Relationship Diagram,
UML

Software/Platform

Mongo, Pg/MySQL, git,
gcc, ELK, Apache,
Firebase, LAMP,
CADSTAR, VSCode, Vim,

Systems

Mac, Ubuntu, Windows