

SKILLS

✱ Programming languages

- ★ Strong in C/C++ and JavaScript
- ★ Also programmed in Python, Java, Ruby, C#, CoffeeScript, VBA and Matlab in the past

✱ Web technologies and frameworks:

- ★ **Basics:** HTML, CSS, AJAX, LESS
- ★ **Frontend frameworks:** jQuery, Backbone.js, Flight, React, D3, RequireJS/AMD
- ★ **Backend frameworks:** NodeJS, Ruby on Rails, Django, PHP
- ★ **Database systems:** MySQL, MongoDB, Neo4J
- ★ **PaaS architectures:** Google AppEngine, Heroku, Parse
- ★ **Development Tools:** Git, NPM, Grunt, Bower
- ★ **Miscellaneous:** Socket.io, Jasmine, Chrome extensions, Google AppScript, PhoneGap

✱ Android development

- ✱ Working with Arduino boards, Atmega series of microcontrollers
- ✱ CAD/CAM software: AutoCAD, Autodesk Inventor

CONFERENCES AND SELECTED PROJECTS

✱ Speaker at JSFoo, India's largest JavaScript Conference, Bangalore 2013

- ★ **One of 20** speakers (including **5 international** speakers) and the **only student** selected to talk at JSFoo 2013. Other speakers were professionals representing organizations like the Mozilla foundation and Microsoft among others
- ★ Talked on control of motors and servos using the **HTML5 Web Audio API**, **NodeJS** and a **headphone jack**. Links to the talk and the slides at <http://ameyakarve.github.io/devResume/>

✱ Fantasy League for Euro 2012

- ★ Built, programmed and ran MyEuroRG, a fantasy league for the Euro 2012 football tournament
- ★ Over 400 regular users. League was featured in the Bangalore Mirror. Link to the newspaper archive at <http://ameyakarve.github.io/devResume/>

✱ Icarus JavaScript framework

- ★ Wrote Icarus, a framework built over Flight (a component based UI framework open-sourced by Twitter), that extends Flight's state variable to a MVC style Model for better data binding
- ★ Open-sourced the framework. Link to the code at <http://ameyakarve.github.io/devResume/>

✱ Android development projects

- ★ Built a location-based Android app for TaxiShout, a Bangalore based startup, to connect the service users with Taxis nearby
- ★ Worked under Professor Venkatesh Balasubramanian from the Department of Engineering Design, on a project to collect and analyze braking patterns in trucks. Android devices were used as cost-effective sensor modules
- ★ Conceptualized and coded an Android app to capture pictures on the click of a physical button as a part of a product design course project. Also implemented a simple email server to convert and process the pictures to a PDF file and email it to the corresponding user

✱ Open Source contributions to Twitter's typeaheadJS, Airbnb's Rendr, TodoMVC and Route66 by Guille Paz

✱ Thesis Project: Working on identification of features in 3D point cloud geometries under Professor M. Ramanathan from the Department of Engineering Design

EDUCATION

✱ Indian Institute of Technology, Madras

2009-14

- ★ B.Tech in Engineering Design, M.Tech in Biomedical Design, Minor in Economics
- ★ CGPA of 7.44

✱ Class XII, Oxford School, Bangalore: 87.6%

2008

✱ Class X, Oxford School, Bangalore: 93.5%

2006

INTERNSHIPS

★ Autodesk India, Pune

Jan – July 2013

- ★ Worked in the **Autodesk 123D Desktop** team on the conversion of 3-Dimensional triangular meshes to their corresponding Boundary Representation (BRep) forms
- ★ Studied the existing algorithms used for BRep conversions
- ★ Devised and implemented new algorithms to increase the efficiency of the conversion
- ★ Obtained running time gains in the excess of **100X** as the complexity of parts increased
- ★ Wrote in C++ for the Windows and Mac OSX builds. Ported existing algorithms from a C# codebase for a different product
- ★ Rated in the **top 3** intern projects. Awarded a **certificate of achievement** for the work

★ Idea Telecommunications, Pune

June – July 2011

- ★ Worked in the **Idea 3G Vertical**
- ★ Reviewed existing 3G based services, analyzed selling techniques and marketing strategies and gathered feedback from consumers as well as the in-house call center employees
- ★ Gave recommendations to improve product experience and reach in the country

★ Tata Motors, Pune

May – June 2011

- ★ Worked in the **Metallurgy and Material Sciences** division
- ★ Studied the Bauschinger Effect in coiled springs to be used in automotive applications
- ★ Carried out accelerated fatigue testing on the springs in Instron machines at the facility

POSITIONS OF RESPONSIBILITY

★ Hostel Literary Secretary

2011 – 12

- ★ Elected by an electorate of 349 voters. Managed a budget of **Rs. 60,000** over two semesters
- ★ Led the hostel to **first place** in the annual year-long inter-hostel literary and cultural championships (Lit-Soc)
- ★ Conducted sessions to bleed in the incoming freshers into various cultural activities
- ★ Built a webapp for better bookkeeping, and to allow residents to borrow books online

★ Coordinator, Mobile Operations, Shaastra

2012 – 13

- ★ Part of the mobile team of the Web Operations Department for Shaastra, the annual technical festival of IIT Madras
- ★ Advised the team on implementations and best practices during the development process

★ Coordinator, Scrabble and Sports & Entertainment Quiz, Saarang

2010-11, 2011-12

- ★ Conducted the corresponding events in Saarang, the annual cultural festival of IIT Madras, as well as the LitSoc in the 2 years

CO-CURRICULAR AND EXTRA-CURRICULAR ACTIVITIES

★ Scrabble:

- ★ **Chennai Scrabble Open: 33rd** in 2010, **10th** in 2012, in the **country**, **Pune Scrabble Open: 23rd** in 2013 in the **country**; Links at <http://ameyakarve.github.io/devResume/>
- ★ Made the **final round** in **4/4** attempts in LitSoc, **3/3** attempts in Saarang
- ★ **1st** place in Paul Fest 2008, St. Paul's school, Bangalore
- ★ Founding member of the college Word Games Club

★ Quizzing:

- ★ **6th** in Karnataka state, Vijaya Bank Quiz, 2005
- ★ Made multiple finals at school and college level over the last few years

★ Coding and Robotics

- ★ Finals at **Semi-Autonomous Robotics**, Shaastra 2009
- ★ Finals at Automania, an **Artificial Intelligence** competition, Shaastra 2011
- ★ Founding member of the college Web Operations Club

★ Sports

- ★ Member of the **hostel football team**, 2009-10
- ★ Successfully ran for **10km** at the **MARG half-marathon**, IIT Madras, 2011