

# Dwaraka Nath

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https://dwarak.in

## Education

- **Birla Institute of Technology and Science** Pilani, India  
*Master of Engineering in Software Systems; CGPA:8.81* July 2014 – June 2016
- **SSN College of Engineering** Chennai, India  
*Bachelor of Engineering in ECE; CGPA:7.59* August 2009 – May 2013
- **DAV Boys Senior Secondary School** Chennai, India  
*AISSE; Percentage:94.2* May 2009

## Experience

- **Amazon** Bangalore, India  
*Software Development Engineer* June 2016 – Present
  - Working on Amazon.in - Seller Experience Platform
- **OrangeScape** Chennai, India  
*Software Engineering Intern* May 2015 – July 2015
  - Developed a module to crowdsource language translations from users
- **Lister Technologies** Chennai, India  
*Software Engineer* July 2013 – July 2014
  - Web Development - Managing the organization's entire website stack
  - Product - Worked on a eCommerce product's UI
  - A Rails project for a US based client

## Skills

**Languages:** C/C++, Java with exposure to Python and Ruby

**Stack** HTML/CSS/JavaScript, RoR, MySQL, PostgreSQL, Docker, Suite of AWS services - Athena, DynamoDB, Redshift, Kinesis, SQS, SNS, EC2, Fargate, ECS, EMR

**Tools/Environment:** \*nix, vim, Git, Bash/zsh

## Individual Projects

**SecretShare:** Firefox OS Mobile application to share secrets with Friends. Uses OneTimeSecret API, IndexedDB memory store & HTML/CSS/JavaScript for frontend. Published in Firefox OS Marketplace.

**ComPair:** Used to match your Facebook friends/peers and finds the best pair among the given choices. Built with Rails for backend, Bootstrap for UI and Facebook Graph API for user authentication, fetching data and posting/sharing content over Facebook timelines. **Won the best creative appliation award at RedHat's OpenShift DevConf 2014, Czech Republic**

**Lexico** Responsive web application that uses WebSpeech API. Dictionary powered by Wordnik API

**Fuse** Dropbox like file collaboration framework within a LAN to share files. Used Google Plus API for user authentication, WebRTC for realtime video/audio streaming and chat. Designed the WebUI using HTML/CSS/JavaScript, Java servlets for backend and used MySQL for DB.

**Flames** Simple name game built with servlets

## Academic Projects

**Plugin-free realtime communication via WEBRTC** WebRTC based realtime voice and video communication infrastructure with a web frontend

**Security Analysis of Bitcoin P2P Transactions** Analysis of Bitcoin P2P Transactions within the scope of user anonymity.

**Faster and Secure MD5** Modification of MD5 hash algorithm using Wide Pipe and Fast Wide Pipe construction to improve the collision resistance and speed

**Blind Source Separation using STFT and Spatial Sparsity** An approach to solve the Cocktail Party Problem - separate signals of distinct individuals by exploiting their Spatial Sparsity in frequency domain using Short Time Fourier Transform

**TFIDF Computation using MPI** Parallel computation of distributed in-memory graph for text documents across multiple nodes using MPI

**Building a DB specific kernel** Compile a minimal kernel targeted at running only a single instance of database

## Certification

**Cisco Certified Network Associate** Completed CCNA during October 2011. CSCO ID CSCO11982736

## Extra-curricular Engagements

**Mozilla Community** Member of Mozilla India community, served as lead for Project News Mozilla, a Mozilla sponsored global project to create regular newspaper articles on digital literacy, open web and data privacy in local languages to create awareness within communities and netizens. **Featured in The Hindu, India's leading newspaper - Finding NeMo with Mozilla**

**Editor, 4Cast** Review and write articles about gadgets and technology

**Web Developer/Designer, NetworkGeek** Developed the site for NetworkGeek training academy

**Volunteer Teacher/Consultant, Teach For India** Teaching school kids about internet safety, awareness and digital literacy

**Open Source** Have contributed to projects like ThoughtWorks' Go, MPITutorial.com for learning/fun