

# Sayak Sarkar

Kolkata / Pune, India

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Website: <http://sayak.in>

Native Tongue: **Bengali**  
Also fluent in: **English, Hindi**

## Professional Experience

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### Red Hat

[Web Developer - Team Lead]

**Duration:** September, 2015 - Present

#### Responsibilities:-

Lead the development team to maintain, improve and expand the development and automation of infrastructure tools via the current integrated internal web portal.

#### Project Details:-

- Strategize the development roadmap for the internal operations portal.
- Guide team members on the development and expansion of the CEE Operations Portal and tools improvement.
- Analyze internal team requirements and facilitate effective automation and improvement of current work processes.
- Implement development best practises for the internal development team to improve productivity.
- Develop Synchronization tools and scripts for various technologies being used by the lab.
- Maintain and improve already developed tools and scripts.
- Coordinate application development for multiple projects.
- Conduct testing and install the code into production.
- Devise possible solutions to anticipate problems; respond to problems and correct the applications as necessary.
- Evaluate and increase the effectiveness of tools and applications.
- Adapt and develop programs to new requirements as necessary.
- Forecast the future of the dashboard and other tools to perform accurate data analysis and management.
- Provide assistance to business users on the effective use of applications and information technology.
- Assist in creating system design and functional specifications for all new development projects.
- Produce technical documentation for new and existing applications.
- Produce technical reports to learn new ways to develop programs and maintain skills and knowledge.

#### Technical Exposure:-

- Web Technologies: HTML5, CSS3, JavaScript, jQuery, Angular.js, Angular-ui, Bootstrap, Karma, FontAwesome
- Automation & Build Management: Grunt
- Web Sockets: Socket.io

- Package Management: NPM, Bower
- Server-Side Technologies: Node.js, Express.js, Forever, PM2
- Data Visualization: Chart.js, D3.js
- Database Management Systems: MongoDB, MySQL, Postgres
- Data Virtualization System: Teiid
- Operating Systems: Fedora, Red Hat Enterprise Linux 6, Red Hat Enterprise Linux 7
- Cloud Technologies: Amazon Web Services, Azure, OpenShift, OpenStack
- Virtualization: Red Hat CloudForms, RHEV
- Infrastructure Management: Beaker, OpenDCIM
- Continuous Integration: Travis, Jenkins, GitLab CI
- Authentication/SSO: LDAP, SAML, Passport
- Designing Tools: Gimp, Inkscape
- Issue Tracking Systems: Bugzilla, GitLab, Jira
- Project Management Systems: Smartsheet, Trello

## **Red Hat**

**[Associate Application Developer]**

**Duration:** October, 2014 - August, 2015

### **Responsibilities:-**

Development and automation of infrastructure tools via an integrated internal web portal.

### **Project Details:-**

- Work with internal team members on the GIS dashboard, web interface, and tools improvement.
- Develop a web interface to synchronize with global labs.
- Develop Synchronization tools and scripts for various technologies being used with GIS labs.
- Maintain and improve already developed tools and scripts.
- Coordinate application development for multiple projects.
- Develop a platform to integrate the dashboard with different Red Hat products and tools.
- Work with the Engineering team on engineering projects to include GIS requirements.
- Conduct testing and install the code into production.
- Devise possible solutions to anticipate problems; respond to problems and correct the applications as necessary.
- Evaluate and increase the effectiveness of tools and applications.
- Adapt and develop programs to new requirements as necessary.
- Forecast the future of the dashboard and other tools to perform accurate data analysis and management.
- Provide assistance to business users on the effective use of applications and information technology.
- Assist in creating system design and functional specifications for all new development projects.
- Produce technical documentation for new and existing applications.

- Produce technical reports to learn new ways to develop programs and maintain skills and knowledge.

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### **Changer Technologies**

**[UI-Developer]**

**Duration:** February 2013 – Present

#### **Responsibilities:-**

Web Development for various company products and services mostly around client-side user-interface design.

#### **Technical Exposure:-**

- Web Technologies: HTML5, CSS3, JavaScript, Angular.js
- Issue Tracking Systems: BitBucket, GitHub

### **Mozilla Foundation**

**[Web Developer - Intern]**

**Duration:** January 2013 - June 2013

#### **Responsibilities:-**

Code new projects focusing on collaboration and the needs of the mentor community. Also, support the technical development and the community adoption of key Webmaker projects and contribute to internationalization efforts for Webmaker Tools. Additionally, liaise between Mozilla Reps and the Webmaker Mentor community to help unify programmatic goals and organizing tools.

## **Project Details:-**

### **1. Webmaker Tools:**

- Local Deployments: Experiment and document local deployment of Webmaker Tools, namely Friendlycode for Thimble & Butter for Popcorn Maker.
- Localization: Localization of first priority Friendlycode section into Bengali.
- Documentation: Prototype with tutorials for Webmaker tools and see what it looks with the mentor kits.

### **2. GenOpen:**

- Provide technical support and leadership to the GenOpen initiative.
- Graphic designing for the GenOpen Badge logos.

### **3. Webmaker MOOC – Teach The Web [<http://hivenyc.org/teachtheweb>]:**

- Development: Development and maintenance of the Webmaker MOOC website for the Teach The Web initiative for Webmaker Super Mentors.
- Tech Team: Setup and co-ordinate the technical and IT operations team for the Mozilla Mentor initiative to serve as a liaison between the technical teams of the Foundation and the volunteers in general.

### **Technical Exposure:-**

- Web Technologies: HTML5, CSS3, PHP, JavaScript, Node.js, Require.js
- Issue Tracking Systems: Bugzilla, GitHub, Asana, Lighthouse
- Web Content Management Systems: Wordpress, Drupal

## **Red Hat**

**[Technical Translations (I10n) - Intern]**

**Duration:** June 2012 – November 2012

### **Responsibilities:-**

Technical translations for the bn-IN (Bengali) locale of the GNOME and LibreOffice Open Source projects.

### **Project Details:-**

#### **1. GNOME:**

Bengali Localizations for GNOME-3.6 dev. Technical translations member for bn-IN team at <http://l10n.gnome.org>.

#### **2. LibreOffice:**

Technical translations and language file clean-up for LibreOffice. Localization team member for the bn-IN locale at [http://translations.documentfoundation.org/bn\\_IN](http://translations.documentfoundation.org/bn_IN).

### **Technical Exposure:-**

- Operating System: Linux [Fedora]
- L10n Tools: Lokalize, Transifex, Pootle
- Version Control System: Mercurial (hg)

## **SDRCLabs**

**[Web Developer]**

**Duration:** August 2011 – January 2013

### **Responsibilities:-**

Development and Management of Web based systems for Symbiosis International University.

### **Project Details:-**

1. **SiCSRnet:** Development of a Drupal based Intranet Portal for Symbiosis Institute of Computer Studies & Research.
2. **SICSRKconnect:** Development and maintenance of Drupal based alumni site for Symbiosis Institute of Computer Studies & Research.
3. **SDRCLive:** Development and maintenance of a video conferencing system for Symbiosis International University based on Drupal and Big Blue Button.

### **Technical Exposure:-**

- Web Technologies: HTML, CSS, JavaScript, PHP, XML, JSON
- Database Management System: MySQL
- Issue Tracking Systems: Bugzilla, Redmine
- Version Control System: Git, Mercurial (hg)
- Content Management Systems: Wordpress, Drupal

## **Academic Details**

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### **Post-Graduation [2013]**

#### **Master of Science in Computer Applications**

Completed Masters (M.Sc. C.A.) in the year 2013 from Symbiosis Institute of Computer Studies & Research (SICSR), Pune under Symbiosis International University with Cumulative GPA of 2.98/4.0.

### **Graduation [2011]**

#### **Bachelor of Science with Honours in Computer Science**

Completed my Bachelors (B.Sc. Computer Science) with Honours, in the year 2011 from Vivekananda College, Kolkata under the University of Calcutta obtaining First Division grades with 61% marks.

### **Higher-Secondary School [2008]**

#### **Indian School Certificate**

Completed my Twelfth standard (I.S.C.) in the year 2008 from St. Joseph & Mary's School, Kolkata under the Council for Indian School Certificate Examinations obtaining an average of 66% marks.

### **Secondary School [2006]**

#### **Indian Certificate for Secondary Examinations**

Completed my Tenth standard (I.C.S.E.) in the year 2006 from Meghmala Roy Education Centre, Kolkata under the Council for Indian School Certificate Examinations obtaining an average of 74% marks.

## Skills and Competencies

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### Interface Design and Layout

Proficient in designing Web based application-interfaces with HTML/CSS. Also skilled in Adobe Photoshop, GIMP, InkScape etc. for print/screen publish media.

### Web Technology and Frameworks

Efficient using HTML5, AJAX/JSONP, CSS-Preprocessors, JS libraries / frameworks. Fanatic about writing well documented human readable, standard-compliant, performance-optimized, bandwidth-friendly markups. Capable of making/managing high-traffic websites on Drupal, WordPress and MediaWiki. Can throw libraries/dependencies off the window & hand-code everything from scratch, if required.

### System Support and Troubleshooting

Experienced GNU/Linux & Windows user, and quite capable of doing a bit of Shell Scripting when required. Also, have a certain amount of experience in Hardware Assembling, Software/Hardware Troubleshooting. Have experience administering private Git, Red Wine, Moodle, etc. servers.

### Software Development and Engineering

JavaScript ninja with a good amount of PHP experience. Can handle most modern programming languages with moderate efficiency and bit of of internet lookup. Have a basic knowledge of conventional programming languages C, C++ and Java. Preferred revision control systems are Git, Mercurial and SVN. Can work on Object/Relational database systems (MySQL, SQLite, Oracle etc.)

### Mobile / App Development

Experienced in developing Hosted as well as Packaged web apps for mobile devices, most notably on the upcoming Firefox OS mobile platform. Also, have a basic experience of working around J2ME based mobile applications.

### Team and Project Management Skills

Experienced team player with a good amount of experience in working with small closely packed teams as well as working with large highly distributed remote teams. Experienced in using most popular Project/Issue Management Systems such as Asana, Lighthouse, Trac, etc.

## Other Projects Undertaken

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### Google Summer of Code 2013

Developed the official WordPress Web App using the Enyo 2.0 framework for the Firefox OS mobile Platform under WordPress as the mentoring organization.

The project page for the project proposal can be found at:-

[http://www.google-melange.com/gsoc/project/google/gsoc2013/sayak\\_sarkar/62001](http://www.google-melange.com/gsoc/project/google/gsoc2013/sayak_sarkar/62001)

The official repository can be found at:

<https://github.com/wordpress-mobile/wordpress-firefoxos>

## Google Summer of Code 2012

Developed a new visual-based keyboard layout system for the Bengali Language under the mentoring organization Ankur India. Further details about the project can be found at the project site: <http://sayak.in/Disha>

## Voila!

JavaScript based project for Hadronization Technologies, to develop the primary Web Application for their Firefox OS based Operating System for Mobile devices which allowed users to create Apps for themselves on their own devices. Further details about the project can be found here: <https://github.com/sayak-sarkar/Voila>

## Miscellaneous Projects

Also worked upon some smaller web projects based on PHP and JavaScript, the repositories for which can be found at my GitHub account: <https://github.com/sayak-sarkar/>

## Extra-curricular Engagements

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### Spreading the Mozilla Manifesto

[To Make The Web a Better Place]

Mozilla Reps' [Mentor](#) and [Reps Council](#) Member, contributor to the [Mozilla Project](#), Webmaker [Super Mentor](#), Senior member of the Mozilla India Community, [Regional Localization Leader](#) for the Bengali Language at Project NeMo and contributor of various projects such as [I10n](#), [SUMO](#) etc.

### Public Speaking/Writing

[Talks, Media Coverages & Evangelism]

Occasionally I give talks and take workshops on open web technologies, Firefox OS Web Apps development etc. Most of my talk slides are available [online](#). I'm a semi-active technical [blogger](#) who has also been interviewed by [YourStory.in](#).

### Other Open Source Projects

[Non-Profit/FLOSS Contributions]

#### Wikimedia Foundation:

Interacted with the Wikimedia Language Engineering Team during various Wikimedia hackathons in India. Currently trying to contribute a ported version of the bn-disha IM to jquery.ime. This requires the resolution of a few jquery.ime issues already filed at the project repository. Status of these issues can be found here:

[https://github.com/wikimedia/jquery.ime/issues/created\\_by/sayak-sarkar?state=open](https://github.com/wikimedia/jquery.ime/issues/created_by/sayak-sarkar?state=open)

#### Ankur India:

Involved with [Ankur India](#) as a volunteer contributor for various bn-IN I10n projects, most notably translation of Firefox, Thunderbird, GNOME and LibreOffice.

#### The Cryptocat Project:

bn\_IN I10n contributor for the Cryptocat project. Details can be found at: [https://www.transifex.com/projects/p/Cryptocat/language/bn\\_IN/](https://www.transifex.com/projects/p/Cryptocat/language/bn_IN/)

#### Drupal Pune:

Was associated with the [Drupal Users group of Pune](#) as a group member.

## Interests and Hobbies

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### **Studying**

I like to study a varied spectrum of subjects, ranging from Literature, History, Politics, Medical-Biology to Religions, Mythology, Comics, and sometimes, Novels et. al.

### **Painting**

I like letting my imagination loose at times with a pencil and paper in hand to relax my brain as well as nurture my creative strings. I have also completed a 5 years diploma certification in Painting up to the 3rd year [2+3 System] under Bangiya Sangeet Kala Kendra during my school days.

### **Gaming**

Action/adventure/platform, stealth/shooter & arcade-racing are my favorite genres of video games. I'm a fan of Need for Speed, Prince of Persia, Project IGI, Delta Force, Call of Duty and Counter Strike series.

### **Puzzles**

Can solve a jumbled up 3x3 Rubik's cube with ease. Currently trying to improve my solving skills and decrease the time taken to solve a ShengShou 3x3 speed cube to below 1 minute.