# Ravi Shankar

## **Open source contributions:**

Mozilla:

- Mozillian since the summer of 2015. Occasional contributor to Firefox and Seamonkey, where I've patched simple Javascript bugs.
- Active contributor to the Servo browser engine (project by Mozilla, currently being written in Rust), primarily concentrating on plugins, understanding DOM and improving the code structure.

Personal projects:

- O Biographer: A command-line based private diary written in Python, which allows users to write their everyday stories, view them (or search through them) later. It makes use of a simple shifting cipher to encrypt/decrypt the contents in O(n) time. I've also written a Rust library for it, which uses FFI and concurrency to reduce the searching time by a factor of  $\approx 230$ .
- o Carrot: An MVC-based webapp which lets organizations to notify their users of the changes made to their webapp(s) by using a simple <script> tag embedded on their webpage, which gets data from our server through the JSONP technique. It was made in a hackathon where I teamed up with another guy and developed the app within 12 hours.
- o Free fall (ongoing): A terminal based 1D-game written in Rust (from scratch), where the users try to save a jumper from hitting the cliffs (when the game ends). The game makes use of the terminal's raw mode and interacts with the Unix C libraries for polling the keystroke inputs and prints thousands of characters frame by frame to indicate motion.
- Various Python scripts written mostly for solving problems in our coursework, our aircraft design project and other routines, which reduced a great deal of time for the fellow undergrads (and me).

## **Programming skills:**

**Languages**: Python, Rust, C, Javascript, Bash, HTML5 and LATEX **Technologies**: Git, Mathematica, some Django and Angular JS

### **Volunteer contributions:**

- Reviewer of Q&A at Physics Stack Exchange for the past two years
- o Gave multiple talks about Python in college
- Volunteer at "Mozboot" sessions (conducted by Mozilla) in college

### **Achievements:**

- o Blogger for the past two years (started off with Wordpress, and landed in Github pages)
- o Full-time coder since the summer of 2014
- $\circ$  Reached level 3 in Project Euler and ranked #135 among the Indian users within 3 months
- o Completed a wide variety of online courses in MOOC platforms
- o ... also, learned to juggle and play Bansuri (a flute) when I'm away from my keyboard