

Rihan Pereira

rihen234@gmail.com • +1.805.444.9850 • [rihbyne.github.io](https://github.com/rihbyne) • linkedin.com/in/rihbyne/

Experience

Bitstreet Technologies

Software Developer

MUMBAI, INDIA
Jan 2016 – Dec, 2017

- Managed multiple repositories. Encouraged use of **Git-flow** design among team of 4 developers.
- Contributions in logical and persistence tier, bitcoin(BTC) gateway integration, setup experimental bitcoin cash(BCH) **wallet app** end-to-end, batch process transaction metadata.
- Secured user accounts using **salting & hashing** technique and Multi-factor Authentication(2FA) with backup & recovery options.
- **HMAC & Signing** applied to JSON-REST/RPC API calls.
- Studied & implemented **Nonce** as an addition to secure message passing between internal services as a defense against replay attacks.
- Developed stateless cursor based **pagination API** at scale, spanning data over multiple MongoDB **collections**(*was reused twice in different application context in production*).
- Used **software multitenancy** on application server to share common set of resources among different tenants using (Role-based Access Control)RBAC and database isolation.
- Produced supportive documentation and designed system diagrams.

Aasaanjobs

Software Development Engineer I

MUMBAI, INDIA
Dec 2014 – July 2015

- Hands-on git, exercised git-flow workflow design, learned to resolve merge conflicts, branching, hotfixes, stash, interactive rebase.
- Refactored and wrote new responsive UI.
- Wrote Javascript code to handle REST endpoints and manipulate it for dynamic UI experience.
- Wrote automated UI tests using PhantomJS - headless browser environment.
- Write python/js scripts to execute database backups, traverse spreadsheet data to fanout notifications.

I maintain my list of active and past projects at rihbyne.github.io/diy.

Education

California State University, Channel Islands

Master of Science(M.S) in Computer Science

CALIFORNIA, U.S.A
Jan 2018 – Dec 2019(expected)

- Presented 'Macaroons as better web cookies' as part of COMP 524 Security class
- Presented 'Scalable Web Architectures(SWA)' as part of COMP 599 Graduate Seminar
- Produced a report on 'Image Segmentation methods' as part of COMP 510 Adv. Image Analysis Techniques
- Compiled a report on 'Financial Analysis between Heineken vs Boston Beer' as part of BUS 504 Finance & Accounting class
- resolved a small UI patch under **good-first-bugs** of mozilla.addons.org project.
- Sketched a interactive **dashboard** as part of COMP 549 HCI class using python-tkinter GUI lib/flask, which integrates an existing handwritten recognition neural network, allows to load/configure/save versions of it.
- Implemented CBC mode to systematically encrypt/decrypt a large plaintext file using 16 rounds of 64-bit DES.

Mumbai University, St. Francis Institute of Technology

Bachelor of Engineering(B.S) in Information Technology

MUMBAI, INDIA
June 2010 – May 2014

- Senior year project on data-driven IoT application using nodeJS/expressJS/raspberrypi
-

Skills

Tools & Programming: Knows Python/Javascript/Node.js and Java. Semantic HTML5/CSS3. Emacs user. Experience writing secure REST APIs in Django, Express.js. Familiar with Memcached, MongoDB, MySQLDB(e.g indexing, schema migrations). Enjoys challenges to architect and implement scalable web applications. Linux Power User. Well versed with Git.

Achievements

- Awarded and recognized as a “Top Performer”, “Best Performing Team”, “Meeting Expectations Plus Performance” for the year 2017 at [Bitstreet Technologies](#).