



RIDWAN SHARIF

🌐 ridwanmsharif.github.io — ✉ ridwanmsharif@gmail.com —  [in/ridwanmsharif](https://in.linkedin.com/in/ridwanmsharif) —  github.com/ridwanmsharif

SKILLS

- Experience in Go, C/C++, Python, Scheme/Racket using vim/tmux and Git
- Interested in security/cryptography, backend engineering and systems design

PROJECTS

mqueue

git.io/vMKXe

- Constructed an in-memory message broker in Go over an HTTP API
- Designed a concurrent, thread-safe publisher/subscriber architecture with multiple topics
- Built an embeddable client library in Go to interface with the API

prsa

git.io/vMKPx

- Built the RSA public-key cryptosystem in Python with a command line client
- Implemented ciphertext generation and decryption routines using generated public-private keypair
- Used highly performant exponentiation algorithms, 1000+ unique page views

lispy

git.io/vyfVt

- Built a Scheme/LISP interpreter in Python with interactive command line environment
- Implemented tokenization, parsing, abstract syntax trees and evaluating of valid scheme code
- Complete with valid scheme interpretation of data structures, error handling and lambda calculus

fzysearch

git.io/vKyww

- Published a fuzzy-string matching pip module/library in Python for approximated query matches
- Used Levenshtein's edit distance algorithm and average weighted distance for ordering results

airport

git.io/vMKXJ

- Published a command utility for fast directory navigation using previously visited locations
- Used fzysearch to prune through search space and identify closest matching result

EDUCATION

University of Waterloo

2016 – 2021 (*expected*)

Bachelors of Computer Science, Honours

- Hack the North (Volunteer), UW Robotics Club, President's Scholarship (95th percentile)
- Selected Courses: Algorithm Design, Functional Programming

ACTIVITIES AND VOLUNTEERING

Volunteer in UAE

Dubai, UAE

Bronze Volunteer

- Volunteered at the Summit Silence, Pink Walkathon, Pink Book Sale, Nike Run, Operation Ozone, Helping Hands, Blood Drives and Ocean Cleanup

HP Electronics

Dubai, UAE

Sales Representative

- Sold 450+ laptops and 250+ printers at Gitex (Gulf information technology exhibition)

St. Mary's Catholic High School

Dubai, UAE

Head-Boy, House Captain, Senior Prefect

- Elected Head-Boy, House-Captain and Senior Member of solidarity group
- Designed school yearbook and prom invites, organised charity events