

# Kamalavelan

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github.com/demonshreder | gitlab.com/demonshreder  
demonshreder | sskamalavelan

## CODE

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- UAUTO** Realtime transport aggregation system using only FOSS technologies  
Learnt OSM's vector map stack, actor model of concurrency, GIS implementation & integration  
Created reference implementations in Go & Rust  
Work in progress
- SDL2-GAMES** Experimenting the use of SDL2 library with cgo  
Mastered fundamentals of video games development from scratch.  
Implemented three classic videogames in Go using SDL  
Learnt cross platform compiling, integrating C & Go
- MONOCYPHER-GO** Ported the symmetric encryption of monocypher, an alternate implementation of libsodium.  
Learnt porting of C memory unsafe programs to Go's GC environment.  
Understood the internals of Go well
- TAMIL-READER** Web application to automate OCR & proofreading for Tamil using ghostscript, graphicsmagick & Tesseract as the OCR engine.  
Learnt systems programming,  
Created using Go
- BIRDBOOK** Tensorflow based web application to ascertain bird species based on uploaded images.  
Created using Python & Django
- PIRATE** Media files directory web app for closed communities  
Learnt & made extensive use of Chrome's File API to scan the user's device for media files & collate them into a searchable database for others to receive the file in person.  
Created using Python & Django

## DIGITAL COMMONS

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- OPENSTREETMAP Frequent mapper  
Created PoC to implement Indic languages in OSM's standard Carto map
- OSM ID EDITOR Contributed India specific icon presets
- ELEMENTARYOS Contributed translations to Tamil language
- AUR Maintain two FOSS packages in ArchLinux's user repository
- ARCHWIKI Create & update wiki pages relating to troubleshooting video games on Linux
- GO-SDL2 Suggested with demonstration the use of MinGW compiler for cross platform compilation of C & Go binaries
- GENTOO Tested out latest releases & filed bug reports with corrections for build process  
Tested conformity of FOSS libraries to latest GCC standards

## EXPERIENCE

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- COOPON Jan 2018 - Present  
Worker owned science & technology firm  
Experiment to achieve economic sustenance through open cooperativism  
Equal ownership of firm to all workers  
Contribute legal, financial, software dev expertise
- FSHM July 2016 - Present  
Free Software Hardware Movement Puducherry  
Started as Pudevai Linux Users
- CRON Feb 2015 - Dec 2015  
Cofounded Ashoka's computing society  
Introduced around 50 people to code for the first time  
Facilitated awareness session about Net Neutrality in India  
Screened & discussed movies about Aaron Swartz & Snowden
- ASHOKA UNIVERSITY Sep 2014 - May 2016  
Founding undergraduate batch  
Elected to frame the student govt constitution  
Protested against the cruelty against animals by the administration  
Took active part in promoting anime & tamil films  
Cofounded computing society

## EDUCATION

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JULY 2017 Discontinued Chartered Accountancy via direct entry  
MAY 2016 **Discontinued** undergraduation due to severe clinical depression  
SEP 2014 Started Bachelor of Science (Hons.) **Ashoka University**, Haryana  
MAY 2014 12<sup>th</sup> Std, CBSE  
431/500 **Kendriya Vidyalaya**, Puducherry  
English, Accountancy, Business Studies, Economics, Informatics Practices  
Mathematics - Additional subject  
MAY 2012 10<sup>th</sup> Std, CBSE  
9.4/10 **Kendriya Vidyalaya**, Puducherry  
English, Sanskrit, Science, Social Science, Maths  
Hindi - Upto 8<sup>th</sup> Std

## SKILLS

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Programming: Go, Python, NodeJS, Rust  
Web Frameworks: Django, HTML5, CSS3, ECMAScript  
Linux: Ubuntu, Gentoo, ArchLinux

## LANGUAGES

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TAMIL: Mother Tongue, Fluent in speaking & reading  
ENGLISH: Fluent in speaking, reading & writing  
HINDI: Fluent in speaking, reading & writing