## Tasdik Rahman

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**EDUCATION** 

## B.Tech in Information Technology, 3<sup>rd</sup> year

2013 - 2017

SRM University, KTR Campus, India • CGPA of **9.24**/10 (Till 5<sup>th</sup> semester)

High School - KV ONGC Panvel, Navi-Mumbai (CBSE) - 60.4%

2011 - 2013

Secondary School - KV ONGC Panvel, Navi-Mumbai - 9.2 CGPA

2004 - 2011

### EXPERIENCE

ONGC, Mumbai: Summer Engineering Trainee

May, 2015 - June, 2015

Worked along with the IT team to design and build a web app for "Offshore Maintenance Group" now being used by their internal employees, running on their intranet.

## coala-analyzer.org: Remote Developer

Jan, 2016 - Present

One of the early members of the now 104 core developers worldwide in the coala community. Wrote bug fixes, documentation and guiding the new comers to the community.

### TECHNICAL

SKILLS

Strongest Areas - Linux, Databases

Languages - Python, Shell Script, C++, Java, C, PHP, JavaScript

Tools/Frameworks - Flask, NLTK, tkinter, Peewee, Tesseract-OCR, Pycrypto, Apache2, Gunicorn, LAMP Stack, Peewee, Heroku, Jekyll, beautifulsoup4, make, monit, STL, MySQL, PostgreSQL, SQLite, Git, LATEX, Travis-CI, Unit-testing, nosetests, Pygame

## SELECTED **PROJECTS**

All projects available on Github: https://github.com/prodicus

- SRM Search Engine: Senior Devoys and Backend developer http://srmsearchengine.in/ A General Purpose Search, funded by the "National Internet Exchange of India". Our team designed and set up a 15 node, master-slave architecture for setting up a Hadoop cluster. Configured "mmonit", to monitor the system processes and writing scripts for automating the maintenance of our server. Wrote scripts to crawl, extract & index millions of pages, used NLP techniques to clear irrelevant data.
- Plino: Founder, Backend developer https://plino.heroku.com/ Conceived plino, a high accuracy spam filtering system built on top of a custom Naive Bayes Classifier to extract specific feature sets. Designed and developed RESTful APIs using Flask for users to integrate our service with their apps. Implemented Caching for server load reduction. Achieved over 3000 users in the first version of the application. Classifier was trained against 33,000 emails.
- spammy https://github.com/prodicus/spammy/ Custom Naive Bayes classifier in the form of pip module, which can be trained on your own dataset for classifying emails into spam/ham. Accuracy achieved: 80%-90%. Blazingly fast once trained. "Dill" was used to serialize the classifier object for later use. Powers https://plino.herokuapp.com/
- vocabulary https://github.com/prodicus/vocabulary/ A pip module, which returns meanings, synonyms, antonyms, usage examples, part of speech, hyphenation, pronunciation for a given word. Inspired by Wordnet, but comes with a better JSON API.
- Space Shooter https://github.com/prodicus/spaceShooter/ A Pygame based classic 2D shooting game recreated in Python. Features include collision detection algorithms for sprites, high FPS flicker-free 2D animations, hot keys and space simulation. Cross platform executable built using cxFreeze and pyinstaller for Linux/BSD, Windows, MAC OS based systems.
- MovieReviewsAnalysis https://github.com/prodicus/movieReviewsAnalysis/ Built a recommendation system which classifies Movies as Good/Bad by analyzing their reviews. Incorporated various Machine Learning algorithms using scikit-learn and NLTK. Built a voting system, combining the algorithms to select best option to achieve higher accuracy. Classifier object was serialized for later resuse instead of training it again.
- https://github.com/prodicus/tnote/ • tnote A cross platform, command line note taking app built using python. Supports Full text search based on content and tags and highlights the query text if match is found. Encryption of database using standard AES-256 in CBC mode. Support to add/remove tags & timestamp in notes. Peewee was used as the ORM choice.

- foodoh https://github.com/foodoh/ Building a food recommendation system during "Startup Weekend 2015". Extracted menu items from menu images using tesseract-OCR. Wrote scripts to scrape reviews of all hotels in bangalore. In progress
- Setting up Multi-Node Hadoop Cluster http://srmsearchengine.in/se.html Was responsible for setting up a 15 node Hadoop Cluster with a master-slave architecture. This Helped increase the efficiency of the crawlers and indexer being run by many fold.
- pyzipcode-cli https://github.com/prodicus/pyzipcode-cli/ A python GIS module which provides a clean JSON API to extract meta-data like latitude, longitude, county and state data using just the zipcode and country code.
- https://github.com/prodicus/xkcd-dl/ A cross platform command line app, which provides a clean and flexible interface to download all/specific xkcd's uploaded till date and store them in your desired folder.
- thanos https://github.com/prodicus/thanos/ A GUI demonstration of SQL injection and prevention techniques on a local SQLite database following the guidelines layed out by OWASP.
- pyCalc https://github.com/prodicus/pyCalc/ An easy to use, cross platform GUI calculator made using tkinter and python.

- OPEN SOURCE DuckDuckGo: Built instant answer modules which have been deployed to production.
  - Coala-analyzer: Improved documentation, wrote tests and handled the new comers to our community.
  - Gitsound: Refactored the codebase to make the application platform independent.
  - cookiecutter: Various Bug fixes.
  - WiproOpenSourcePractice/openbdre: Improved Documentation.

## AND AWARDS

- ACHIEVEMENTS SRM Search Engine got covered thrice in *Times Of India*, a leading newspaper & by *Vasanth TV*.
  - Space Shooter got featured by importpython, Python Digest, Pythina.org, dighub.ru, oschina.net, mybridge.co, recordnotfound.com, neuropuff.com & Product Hunt in games genre.
  - Plino got featured on *Product Hunt* in **tech** genre.
  - vocabulary got featured by Pycoders, Python Weekly & Import Python.
  - tnote got featured by Import Python & Python Weekly.
  - spammy got featured by *Import Python* & the hugely popular "awesome-machine-learning" list on github.
  - Senior Systems administrator and backend developer for the govt. funded project, SRM Search Engine.
  - Senior Member of the College Coding Club, Code Rumble
  - Silver Member of SRM Innovation and Incubation Club

# Conferences

- WORKSHOPS & Team leader for the hackathon, "Startup Weekend 2015" Chennai.
  - Attended SciPy India 2015, held at IIT Bombay.
  - Attended PyCon India 2014, 2015 held at Bangalore.
  - Attended Buildroid Android Workshop, held by the Google Developers Club Chennai.

## Extra -CURRICULAR

• Volunteer for "The Green Nest", a non profit NGO. Being a part of which I dedicated my Sundays going to various orphanages in Chennai area and helping children learn their study material and beyond that.

## Relevant Courses

Data Structures and Algorithms, Discrete Mathematics, Probability And Queuing Theory, Object oriented analysis and Design, Computer Organization and Architechture, Database Management Systems, Computer Networks, Operating Systems, Cryptography, Software Engineering

You can visit http://tasdikrahman.me/ for more More