# SANGAM KUMAR

meetsangamcse@gmail.com • +91 7602054727 • Bangalore, Karnataka, India

#### EDUCATION B.Tech in CSE - National Institute of Technology Sikkim

2015 - 2019

High School - Hare Krishna H/S Vidyalay, Vaishali, Bihar (BSEB)

2015

Secondary School - Krishnanand Memorial Academy, Munger, Bihar (CBSE)

2012

#### EXPERIENCE

# Full Stack Developer at HackerRank, Bangalore

June, 2019 - Present

Developing Enterprise softwares for Projects team. Owns code base for DevOps Engineers Accessment tool, built on top of AWS EC2 Instances, which is used to access candidates for DevOps Engineering role. Currently working on automated scoring for candidates.

### Software Developer Intern at HackerRank, Bangalore

Mentored by Harishankaran Karunanidhi, CTO & Co-Founder

Jan, 2019 - June, 2019

Worked closely on the payment automation using Stripe API to generate billing receipts for the Enterprise customers and send the bills to a given billing email. Implemented a method to check the browser's compatibility for statuscheck page. Migrated contests' pages from BackboneJS code to ReactJS e.g, contest projecteuler. Implemented a comment box for HackerRank's Sourcing platform which appears to the recruiters for the candidate who attempts a recruiting test. Built an UI Icon library using SVGR which transforms given SVGs to desired React's Component, and added Babel config to compile the Components. Main stacks used are RoR and ReactJS.

# Winter Research Intern in Applied Cognitive Science Lab, IIT Mandi

Mentored by Dr. Varun Dutt, SCEE and SHSS, IIT Mandi

Nov, 2017 - Jan, 2018

Developed a solution to fetch sensor's data deployed under soil and save it to the database for the Low Cost Early Warning Solution for Landslide using Arduino and 12 geological sensors. The sensors are used to collect the data values of an amount of rainfall, soil moisture, and angle variations. The data collected from the sensor triplets placed in different locations are sent to the cloud server via GSM. Created a solution to predict landslide by using z-score of total collected soil movement's data and send alert to people, using SMS-PP (Short Message Service, Point-to-Point) and SMS-CB (Short Message Service, Cell Broadcast) to pre-warn the people in the areas of increased risk of danger.

# Summer Trainee, Motilal Nehru National Institute of Technology

Jun, 2017 - Jul, 2017

Attended 200 hrs of training on Enhancing Skill for Enterprise Scale Application Development and built a Registration Portal for workshop registrations using JSP, MySQL, and Bootstrap.

#### Volunteer.

#### Student Developer, Google Summer of Code 2018

Software Developer at coala.io

Apr. 2018 - Aug. 2018

Worked on the enhancement of automated tests of coala, an open-source language independent code analysis tool, written in Python, and base class of coala-bears and its tests. Code Enhancement Proposal can be found in coala/cEPs repository. Also, created 2 bears(static analysis tools) for Ruby and 1 bear for Crystal by wrapping Brakeman, Fasterer and Ameba respectively.

### Student Developer, Kharagpur Winter of Code 2017

Software Developer at coala.io

1 Dec, 2017 - 31 Dec, 2017

Updated html-linter from version 0.3.0 to 0.4.0 of HTMLLintBear and fixed PyLintBear which was breaking on Python 3.5.0.

#### Web Developer, Web Development Cell (WDC), NIT Sikkim

Jan, 2017 - May, 2019

Worked with the WDC Team to develop institute's dynamic website. The website, deployed at nitsikkim.ac.in, uses PHP and MySQL as initial tools and Bootstrap framework for stylesheets. I lead the Image Processing Team and maintain placement.nitsikkim.ac.in.

#### TECHNICAL SKILLS

**Strongest Areas** - Web Development, Databases, Algorithms **Languages** 

- **Proficient** Python, PHP, JavaScript, C/C++
- Familiar Shell Script, Swift, C#, Ruby, Dart, Java

#### Tools/Frameworks

- Proficient ReactJS, Ruby on Rails, MySQL, Flutter, Git, AWS, pytest, unittest, coala, IATFX, VSCode, Unix-System (Linux & MacOS)
- Familiar Babel, SASS, Redux, Karma, Yarn, Rspec, Django, Android, OpenGL, NodeJS, AngularJS, Docker, PyGame, NumPy, Keras, NLTK, matplotlib, PostgreSQL

# Relevant Courses

Data Structures and Algorithms, Operating System, Computer Graphics, Computer Networks, Databases, Automata Theory, Distributed Computing, Software Engineering, Computer Organisation, Deep Learning, Natural Language Processing

# RECENT Research

Research on Firefly algorithm (a new swarm intelligence algorithm) for big data optimization.

#### SELECTED Projects

All projects available on git: https://www.github.com/sangamcse

- Online Examination System: Developed a MCQ-based online examination tool using PHP, MySQL, HTML, JavaScript and Bootstrap.
- Registration System for workshop: Developed a registration system along with a chat room system which has image upload and update system, using JSP, PHP, MySQL, HTML and Bootstrap.
- Google Calculator for iOS: Created a Google Calculator like basic Calculator for iOS app using Swift.
- PNR Status Checker: Created a CLI tool to check passenger name record in Indian Railway Journey, using Python3 and requests module.
- Snake Game: Created a script for snake game using Python2 and curses module.
- Abhiyantran'17 Website: A website for technical festival of NIT Sikkim.

# AND AWARDS

- ACHIEVEMENTS Former Mentor at Google Summer of Code 2019.
  - Former Software Developer Intern at HackerRank, Bangalore.
  - Former Mentor at Google Code-in 2018.
  - Former Student Developer at Google Summer of Code 2018.
  - Software Developer at coala.io.
  - Former Mentor at Kharagpur Winter of Code 2018.
  - Student Coordinator of Training and Placement Cell, NIT Sikkim.
  - Image Processing Team Lead of Web Development Cell, NIT Sikkim.
  - Active participation on online competitive coding websites HackerRank, HackerEarth, etc. Member Handle - sangamcse
  - Selected for HackerEarth Campus Ambassador Program.
  - Joint Team Member of Technical Talk at Abhiyantran 2017.
  - Creativity Team Lead of Abhiyantran 2017 Tech fest of NIT Sikkim.
  - Creativity Team Lead of Udgam 2017 Cultural fest of NIT Sikkim.

Hobbies

Contributing to Open Source, Traveling, Photography

More

Please visit https://www.sangam.dev