SANGAM KUMAR

meetsangamcse@gmail.com ● +91 7602054727 ● #B11, NITSKM, Ravangla, South Sikkim, India

EDUCATION	**B.Tech in Computer Science and Engineering, Senior Year**	2015 - 2019

National Institute of Technology Sikkim, India

- CGPA of **7.34**/10 (Jun 2018)

High School - Hare Krishna H/S Vidyalay, Vaishali, Bihar (BSEB) - 78.2% — 2015
Secondary School - Krishnanand Memorial Academy, Munger, Bihar (CBSE) - 87.4% — 2012

EXPERIENCE

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 sensors 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 movements 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.

Web Developer, Web Development Cell (WDC), NIT Sikkim — Jan, 2017 - Present
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.

Summer Trainee, Motilal Nehru National Institute of Technology — Jun, 2017 - Jul, 2017
200 hrs of training on Enhancing Skill for Enterprise Scale Application Development(Core Java, Advanced Java, Design patterns, frameworks & Web Design) and created a Registration System 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.

TECHNICAL SKILLS

Strongest Areas - Web Development, Databases, Algorithms
Languages
- **Proficient** - C, Python, PHP, Java, C++
- **Familiar** - Shell Script, Swift, C#, JavaScript

Tools/Frameworks
- **Proficient** - MySQL, Git, pytest, unittest, coala, LaTeX, VSCode, Unix-System (Linux & MacOS)
- **Familiar** - Django, PostgreSQL, PyGame, iOS, Android, OpenGL, AngularJS, NodeJS, Docker, NumPy, Keras, NLTK, matplotlib

RELEVANT COURSES

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

CURRENT WORK

Working 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.

ACHIEVEMENTS AND AWARDS

- Mentor at Google Code-in 2018.

- Former Student Developer at Google Summer of Code 2018.

- Software Developer at coala.io.

- 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 http://www.meetsangamcse.me