

NAYAN KHANNA

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in nayankhanna

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Nayan-Khanna

EXPERIENCE

Teaching Assistantship

Department of Mathematics, BITS Pilani

August 2019 – Present Pilani, India

- Working under Dr. B.K. Sharma (Associate Prof and Head, Department of Mathematics, BITS Pilani) as a Software Developer
- Working on softwares to register users with fingerprints and prove biometric access.
- Working on a platform to schedule meetings and conferences within/between department(s), leave management system.

Machine Learning Intern

IDS Infotech Ltd.

May 2019 – July 2019 Chandigarh, India

- Worked on Python and Machine Learning projects: Interpretation of American Sign using Convolutional Neural Networks by OpenCV, TensorFlow.
- Analysis of Titanic DataSet, California Housing DataSet, Stack-Overflow Developer Survey DataSet.
- Introduction to NLP: N-Grams, Stopwords, Detecting language from text, Summarising the text.
- Deployment of ML Model using Flask, Webapp for users to learn ASL Language.

Web Team Head

Students Union Tech Team, BITS Pilani

Mar 2019 – Present Pilani, India

- Supervise and lead the development of various softwares, recruitments, training of students. Initiatives taken under me:
- Complete revamping of SU Portal backend from deprecated Python 2, Django 1.8 to Python 3.6, Django 2.2 and redesigned Database Architecture for ease in scalability.
- Complete revamping of SU Portal frontend with beautified elements and responsiveness across all devices.
- Development of a Cross Platform (Android, iOS) apps having the functionalities of SU Portal, and realtime Expenses Review System for students to keep track of their expenses across various food outlets in the campus.

Back End Developer

Students Union Tech Team, BITS Pilani

Aug 2018 – Feb 2019 Pilani, India

- Worked on the **SU Portal** which aims to ensure the transparency in the signings and cancellations of various merchandises and events organized by all the clubs/departments in the college, throughout the year.
- Implemented QR Based Delivery System for Delivery of merchandises and entry of events through QR Scanners.

EDUCATION / COURSES

Integrated BE CSE and MSc. Maths

Birla Institute of Technology and Science

August 2017 – Present

- CGPA 7.9

High School Education

D.A.V. Public School, Ludhiana

May 2017

- Within 98.7th percentile in JEE Mains 2017
- Secured 94.2% in class 12a) Non-Medical (CBSE Board). (Within Top 2% in India)
- Secured 10 CGPA in class 10 (CBSE Board)

PROJECTS

American Sign Language Classifier

- Used OpenCV and Convolutional Neural Networks for identification of American Sign Language Symbols.

Official **SU Portal**, **SU-App**

- Transparency in signings and cancellations of various merchandises and events and QR based delivery of merchandises, QR Based Entry of Events and Prof Shows.
- Realtime tracking of student's expenses at various food outlets in campus and setting Monthly limits, personalised Push notifications.
- The revamped portal is in Beta Testing Stage and will replace the one in the above link.

Alertify

- Tsunami Prediction and Alert Mechanism WebPortal + Android App, made for Smart India Hackathon, 2019
- Support for District Administrators to issue bulk customised SMS messages, monitor the rescue operations.
- Facility for users to donate for the victims
- chatBot section for users to seek help and important information related to rescue operations and supply timings.
- New section wherein live tsunami related news are shown

RegSoft

- Official Registration Software to be used by various administrative departments for registration, accommodation, participation of participants for various events, competitions in the fests.
- Currently available just on our testing server.

PCrAdmin

- Software for registration, adding/removing events, payment, confirmation mails for outstaying participants participating in various competitions of the fest.
- Currently available just on our testing server.

Backend Developer

Department of Visual Media, BITS Pilani

📅 Jan 2018 – Mar 2019 📍 Pilani, India

- Worked on server side code of the official websites and apps to be used in the fests of our college, including Registration Softwares, Snaps Portals, Main website, Wallet for all transactions during fest at stalls, events, etc.
- See: RegSoft, PCrAdmin, Registrations, Wallet in Projects Section

Backend Developer

GitAllTech

📅 June 2018 – Aug 2018 📍 Delhi, India

- Implemented features: Adding, Editing Tutorials, Nested Comments and Replies System, Tags feature for posts, Generating User feed, Users can create a project (an ordered series of tutorials), Registering Users, Sending Verification Emails, Logging in of users, Sharing on various platforms.
- Participated in various Ideas Pitching Sessions and proposed new features for enhancing coverage, User Platform Sharing incentives, etc.

Open Source Contributor

GNU Mailman

📅 Dec 2019 – Present 📍 Pilani, India

- Contributed to various open source projects including Mailman Core, Postorius, Mailman for large scale organisations like GNU Mailman.
- [Gitlab Profile](#)

ACHIEVEMENTS

- Won the [Smart India Hackathon, 2019](#) organised by Government of India. Worked on Tsunami Detection and Alert Mechanism.
- Secured International Rank 21 in [Cyber Olympiad, 2015](#)
- Regional Silver Medallist in [International Mathematics Olympiad, 2016](#)
- [AIR 1 in DAVUET Entrance Examination](#)

SKILLS

Python, Django, C, REST API, Unix



MySQL, Git, Java, HTML, C++, Web Hosting



R, Nginx, JavaScript, JSON



Wallet

- Official Wallet app for handling all transactions during the fest; may it be transactions on food stalls or event participation
- QR code Ticketing system for events
- The project is currently not hosted anywhere and the code is in a [Gitlab private repository](#) of DVM, BITS Pilani which is accessible only to members of organisation.

Shopmania

- An Online Shopping application made as a fun project in Django, Python
- Had Real Time Cart Maintenance, Adding, Deleting items to cart, Checkout along with payment gateway integration.
- Session Storage to preserve Cart Items for Users

Small Miscellaneous Projects

- Various simple peer to peer chat, group chat applications made while learning Python, basics of Sockets, exploring the Pusher Real Time Services
- Integration of Django and Firebase Apps to use Firebase Authentication, Real Time Database.
- Worked with invoiced APIs for sending invoices to clients at regular intervals and at specific deadlines
- Various Social Handles Integration in Django, Flask and log in of users through their social handles.
- Build some web scrapers in python using BeautifulSoup, Selenium.
- Automation of Customised Bulk SMS and Email Sending Services using SendGrid, MSG91 Services.