# Aditya Vikram Singh

xypnox.com
xypnox
xypnox

nareshr@iitkgp.ac.in
+91-7872833729

A-211, LBS Hall of Residence, IIT
Kharagpur, WB, India - 721302

## Education

| 2017-2022 (Expected) | M.Sc. (5 year) in **Physics** **Indian Institute of Technology**, Kharagpur | GPA: 7.75/10.0 |
|---|---|---|

## Technical Skills

| | |
|---|---|
| Programming | *Proficient:* Python, Javascript, Frontend |
| | *Competent:* C, C++, Rust, Golang, Haskell |
| Libraries / Frameworks | Flask, Requests |
| Systems / Platforms | Git, Heroku, Linux, Android |

## Work Experience

**May** — **May 17** · **Assistant Tech Coordinator** · **Gymkhana IIT Kharagpur**
- Wrote an end-to-end GraphQL API service in Java for opting out of QuickBooks Online's core subscription.
- Deployed a Machine Learning model to help Intuit predict potential paid customers for QBO using trial data.
- Reduced erroneous reports by over 30% from other teams to QBO's Billing team with a revamped internal tool.

**Jun 16** — **May 16** · **Software Engineer Intern** · **ezDI, India**
- Automated migration & replication of real-time data from Amazon RDS to Redshift, optimized for full-table queries.
- Implemented proof-of-concepts to embed a Business Intelligence (BI) solution into the platform and wrote base models that can be extended as reusable SQL views.

**Apr 16** — **Feb 15** · **Software Team Member** - Kraken 3.0 · **Autonomous Underwater Vehicle Research Group**
- Worked on the image processing team at IITKGP's autonomous underwater vehicle research group.
- Wrote algorithms in OpenCV and ROS for the bot to successfully complete tasks like Buoy detection and path following. Implemented Neural Network based adaptive image segmentation to adapt to changing lighting conditions.

## Projects

- **TodxPy**
  Created a command line todo application which focuses on simplicity and usablity using Python.
- **Gymkhana Website**
  Worked on the newer version f Gymkhana website
- **Selene**
  Built a social music-recommendation Android app based on YouTube that analyzes usage data from friends and nearby users and recommends the most popular tracks.

## Hackathons & Competitions

**Mar 17** · **MetaKGP Dashboard** · **Inter-IIT Tech Meet '17**
- Won bronze medal for building a NUS-Mods style dashboard with various utilities created for students of my college. The dashboard was built with a NodeJS backend and had several utilities including smart timetable, news aggregator, question paper portal and professor finder to name a few.

**Dec 16** · **StoI** (SMS to Internet) · **Pragyan Hackathon '17**
- Made an android application for basic internet access like Google Maps navigation, Duckduckgo quick search, Zomato reviews, etc. without a data connection. Communication with the server was done using Twilio's SMS APIs.

**Apr 16** · **Data Extractor for 2D plots** · **OpenSoft '16**
- Built a graph extractor that detects multi-variable graphs in any given PDF and tabulates them autonomously taking into consideration features like axis values, scales and legends.