

# TANMAY MUNJAL

Edmonton, Canada

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## LINKS

[\*Github\*](#), [\*Linkedin\*](#)

## EMPLOYMENT HISTORY

- ❖ **Solana Smart Contracts Developer, DefiOS** ..... May 2023 — Present  
Remote
  - Built **AMM(Automated Market Makers)** to allow for the effective flow of custom-generated **SPL tokens as derivatives of underlying tech value of the Repository of code they represent**
  - Built a **custom Merkle tree on-chain to store hash proofs of large-scale indexed user data** on-chain while storing data on Solana ledger using CPI program logs to allow for universal access to the data using external indexers.
  - **Built an on-chain program that syncs with GitHub data and allows incentivization of open source contributions by repository owners and community,**
  - Played a central role in the system design of 2 major smart contracts, one related to the synchronization of GitHub data and incentivization of open source contributions, the other for the purpose of **on-chain skill validation and large-scale indexing of off-chain data.**
- ❖ **Software Engineer, OnFinance** ..... Nov 2022 — Mar 2023  
Hybrid, Bengaluru
  - **Led end-to-end the maintenance, creation, and scaling of the entire Python and Golang backend in a fast-changing environment in an early-stage startup.**
  - Created a custom python backend logging system to capture and store system data for debugging and analytics, **reducing production outages by 90%.**
  - Created CI/CD pipelines to streamline Kubernetes deployment and monitoring.
  - Integrated Mixpanel logging throughout the entire backend, and also helped create custom dashboards using Retool, decreasing **product data request turnaround times from an average of 1 week to less than 10 minutes.**
- ❖ **Full Stack Developer, Clancy Studio** ..... Jun 2022 — Nov 2022  
Hybrid, Chandigarh
  - Led the company's migration from on-prem hardware to the cloud, **increasing scalability and reducing yearly hardware costs by 80%.**
  - Led the development of an internal database abstraction layer **standardizing database access throughout multiple micro-services.**
  - Developed automated python bots to automate large parts of the company's inner workings, reducing time spent on **manual daily tasks by 95%.**

## SKILLS

Python	<i>Experienced</i>	NodeJS	<i>Skillful</i>
Golang	<i>Experienced</i>	Anchor	<i>Experienced</i>
Rustlang	<i>Experienced</i>	Solana	<i>Experienced</i>

## EDUCATION

- ❖ **University of Alberta** ..... Sep 2023 — Present  
*Bachelors of Science* ..... Edmonton

Freshman at the University of Alberta,  
Pursuing a double major in Physics and Computing Science



## EXTRA-CURRICULAR ACTIVITIES

### ❖ Authored a published book .....

Wrote and got my book published on single variable differential and integral calculus "Mathematical methods of calculus"

### ❖ Research on sociological implications of Crypto .....

Published a research paper on the impact of private cryptocurrency on sociological and political level, especially how many already existing technologies could be integrated to create a hyper privacy coin and the disaster it can cause to the modern financial structure of the world

### ❖ Placed first at TH.0 Hackathon .....

Created an ERC20 token, payment mechanism bot, and a web scraper within 24 hours while collaborating with other team members on code and product ideas.

### ❖ Studied undergrad level Physics in 8th Grade .....

I was given permission to give Bsc.Hons. exam in Physics in 8th grade by head of Physics department, PU, Chandigarh

### ❖ Robotics Developer ..... Oct 2023 — Present ARVP Edmonton

Onboarding and starting to contribute to ROS2 python and C++ codebase that interacts with embedded hardware, running an underwater robot that placed 3rd in RoboSub last year.

### ❖ ML Developer ..... Oct 2023 — Present UAIS Edmonton

Leading the development of a sentiment analysis bot that takes in unlabeled data from a hockey team's Reddit and analyses the average sentiment of each hockey team throughout the game.

## PROJECTS AND FREELANCE

### ❖ Large scale scrapping and data pipelining .....

Worked as a freelancer to aid a high-ticket B2B startup in large-scale scrapping and analysis of data to find the ideal customer to target and market.

### ❖ API abstraction layer .....

Aided a Fintech startup to create an API wrapper over their existing infrastructure to allow for clean usage patterns and effective abstraction in the connection layer between their Frontend and Backend

### ❖ Gas optimised Solidity contracts .....

Optimized a Polygon Solidity contract to be more gas efficient by reducing unnecessary multiple loops, copying data into memory when no change was being made to it, etc.

Link: <https://github.com/tanmaymunjal/journal3-contracts>