Parminder Singh

Machine Learning Engineer

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EXPERIENCE

Freelance, *Machine Learning Engineer*
December 2017 - Present

- Implemented a desktop application in Python for prediction of pre-seizure signal patterns in streaming data with 88% accuracy.
- Implemented a Python script for motion correction of EEG signals, which replicated original signal with 0.4 MSE(mean squared error).
- Implemented a classification model to identify the current stress level of the patient. Achieved 95% accuracy.

Chingu Cohorts, *Machine Learning Engineer*
October 2016 - Present

- Implemented tools for management of cohorts and analysis of cohort text data.
- The team creation and clustering of members was automated and clusters were great assist to Cohort creation team.
- Led a data science cohort for building an image classifier for darth lord images and a web dev team for making space invader game.

Creatella, *Front End Engineer*
April 2016 - June 2017

- Implemented service worker for web push notifications for increasing user engagement by notifying users without keeping website open.
- Designed and implemented messaging system of chat and notifications using Laravel and Web Push notifications for apps, Bilingua and Phoneswap.

PROJECTS

Chingu Sort — *ML tool to form teams of applicants*
- Implemented Python script for clustering of new applicants based on survey input.
- Formed teams of 400 Voyage applicants within seconds, this was earlier done by hand over a week.

Chingu Lasso — *ML tool for detection of unreliable team members*
- Implemented Python script that uses Slack messages to detect the churn probability for each member.
- A detailed excel report is output that allows team managers to take action and use Lasso to re-establish interest of churn team member.

Evolution Strategy AI — *AI that used evolution to play space invaders*
- Implemented in C++ using MLpack library, this gamebot took just the game screen as input (frame by frame) and was able to make decision of moves.
- Based on OpenAI's Evolutionary Strategies research paper from March 2017.
- Implemented using OpenMP for parallel processing, C++ for learning algorithm and OpenAI gym for simulation.

EDUCATION

Chandigarh Engineering College — *B. Tech CSE* (2015 - 2019)
GPA: 7.6 / 10 (till 3rd year)

- Learned about various computer science concepts that include Design and analysis of algorithms, data structures and system programming.
- Part of Super Achievers batch for hands on experience in building data structures.

Skills

C++, Python, Javascript and Go
Data analysis and Visualisations
Cloud Computing
Machine Learning and Deep learning
Tensorflow, Scikit-learn, Vue, NodeJS
Progressive Web Apps

Achievements

Ranked 20 / 4656 in Hacker Earth's Machine Learning Challenge 4 by predicting the network attack from TCP trace data.

Ranked 217 / 1386 in Personalized Medicine: Redefining Cancer Treatment Contest on Kaggle by identifying the class of Cancer using medical report and Gene variation as input.

Ranked 708 / 99473 in Round 1 and 207 in Semi-finals of TCS Codevita conducted at college campus. The competition constituted of problem solving using algorithms and data structures.

Courses completed

Google Cloud Machine Learning APIs (Google Qwiklabs)

Data Scientist Learning Path (AWS Educate)

Hands-on Machine Learning (Book)

Machine Learning A-Z (Udemy)