Arpan Ghoshal

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EDUCATION

PES University   **Bangalore, India**
B.Tech in Computer Science and Engineering   **Aug 2017 - May 2021**
Specialization in Data Science | CGPA 7.1
- *Research: Published* a research paper titled "CATAQ: Concise Answer to Any Question" in the IEEE conference ICSES-2021; presented a novel technique for answering complex questions in intelligent assistants
- *Hackathon: Created* a hashtag recommender during a 48-hour hackathon; **predicted** hashtags for images to increase the virality of the uploaded post; **appreciated** by the startup founders/judges with an award

ACADEMIC PROJECTS

EmoRoBERTa: 28 emotions predictor   ***Jul - Aug 2021***
   Open-sourced a deep learning model based on extracting **28**+ emotions from text with F1 score of **49.3%**; average downloads of **6000+** per month in HuggingFace.co

Ride Share App   ***Jan - Apr 2020***
   Developed a cloud-based application for booking and splitting cab rides using Flask, Docker, RabbitMQ, Zookeeper, AWS EC2 & AWS Load Balancer; **created** a fault-tolerant & highly available database as a service (DBaaS)

Image Caption Generator   ***Feb - May 2020***
   Built deep learning application to generate captions from image by CNN-LSTM algorithm with BLEU score of **0.59** in validation dataset; **improved** BLEU score by **37%** from baseline

WORK EXPERIENCE

HITCH WORKS INC.   **(remote) Seattle, WA, USA**
Machine Learning Engineer   **Oct - Present 2021**
- **Improved** resume skill extraction by developing algorithms using NLP, Machine Learning, & Information Extraction to retrieve skills from resume using contextual information; **resulted** in average of **150%** more skills extraction
- **Contributed** to ingesting job descriptions and meta-information from different open sources, dynamically; **resulted** in **2 millions more** job information, later used for analytics.

BRAINENTECH NEUROSCIENCE   **Bangalore, India**
Machine Learning Engineer   **Jan - Sep 2021**
- **Developed** a real-time AI-API to aid cognitive computing of human speech**; trained** using a correlation of the brain's EEG signals produced while listening to specific speech; API is used by **100,000+** customers
- **Contributed** to NLP research on unstructured text analysis and algorithm training in unbalanced data; **resulted** in a research paper about **to publish** next year.

NAYAONE   **(remote) London, UK**
Data Engineer Intern   **Jun - Aug 2020**
- **Designed** and developed the data-API, an interface for large scale and secure data fetching and transferring
- Presently **used** by the **Financial Conduct Authority, London** to test FinTech products

METRO TYRES   **Ludhiana, India**
Software Engineer Intern   **May - Jul 2019**
- **Developed** Python APIs that assisted in resolving product-related complaints & assigning customer service engineers to solve them impacting growth in productivity of customer service department

EXTRA CURRICULAR ACTIVITIES

- **Developed** farm credit system as an **AI Lead** in a startup **Sensegrass Inc**. for farmers with the help of AI and FinTech technologies (Sep 2021 – Present)
- **Taught** Mathematics in **Akshar, India** to 100+ disadvantaged junior high school students (Jun 2021 - Present)

SKILLS

Tools: Python, C, C++, JavaScript, Flask, Amazon Web Services, Docker, PostgreSQL, MongoDB, Sklearn, TensorFlow, PyTorch, NLTK/SpaCy, Pandas/NumPy, Librosa, Transformers, git, Linux
Languages: English (Advanced), Hindi (Bilingual), Bengali (Bilingual), Punjabi (Intermediate)

Certifications: AWS Solutions Architect Associate, TensorFlow Developer (deeplearning.ai), Data Science Professional (IBM), Machine Learning Bootcamp (CodeAsylums), Web Development with Python (Aptech)