Jatin Lamba

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Education

Indian Institute of Technology Bombay Mumbai, India
B.Tech with Honors in Computer Science and Engineering | Major GPA: 9.18/10.0 *July 2017 - June 2021*

Key Courses: Calculus, Linear Algebra, Data Analysis, Data Structures And Algorithms, Advanced Machine Learning

Professional Experience

Edge Focus Partners | Quantitative Developer | Bangalore, India *June 2021 - Present*

- Spearheaded the overhaul and automation of core data pipelines and loan trading infrastructure.
- Built proprietary data stores to standardize raw statement and API data from partner platforms, enabling accurate real time performance tracking. Created dashboards to monitor realized vs forecasted risk-return across all company portfolios.
- Developed tree-based underwriting models enhancing credit risk accuracy and reducing loan losses by 10-20%. Integrated alternative datasets boosting model risk predictiveness, improving returns by 15% for the same spend.
- Managed portfolio worth over $150 million, addressing investor needs and consistently delivering market-beating returns. Evaluated and priced loans exceeding $1 billion under different economic regimes in the process.
- Collaborated cross-functionally with engineering, research, capital markets, and investment committee teams.

Adobe Research | Deep Learning Research Intern | Bangalore, India *April 2020 - July 2020*
Accepted at NAACL 2021 conference [paper] | Secured a US patent [patent]

- Proposed a new multimodal input-output question-answering task to enhance document comprehension and user experience.
- Curated a new dataset by extending existing large datasets heuristically, and developed a novel DL framework to extract multimodal answers, achieving 13% and 45% superior performance over text and images baselines, respectively.
- Created an interactive webpage demonstrating the technology's practical application on PDF documents.

FlexiEle | Artificial Intelligence Intern | Gurugram, India *Dec 2019 - Dec 2019*

- Developed a resume parsing and recommendation tool with 89% accuracy in python, featuring an intelligent data parser, a machine learning content classifier, and a profile mapping engine for relevant candidate matching.

Research Experience

Cross-Modal Learning in Videos | Bachelor Thesis Project | IIT Bombay, India *July 2020 - May 2021*
Advisor: Prof. Ganesh Ramakrishnan | Accepted at Interspeech 2021 conference [paper]

- Designed networks to detect and localize occurrences of audio and visual events in a video under weak supervision.
- Modeled interactions between the two streams using context-aware attention, adversarial training, and skip connections without deteriorating individual modalities signals in skewed dataset.
- Achieved 5% improvement over state-of-the-art across all metrics, proving the effectiveness of robust cross-modal techniques.

Memory Reclamation in Data Structures | TU Braunschweig, Germany *May 2019 - July 2019*

- Developed a transformer function that converts lock-free data structures from automatic garbage collection to safe memory reclamation. The synthesis algorithm involved incorporating hazard pointers based on parity games.
- Built a parser for constructing abstract syntax trees of data structure functions in C++.
- Computed the program's state space and reduced it by 60% by implementing a symmetry reduction methods.

Achievements And Activities

- Secured All India Rank of 33 in JEE among 1.2 million candidates. *June 2017*
- Honored with the prestigious KVPY Fellowship by the Government of India. *March 2017*
- Received NTSE scholarship (top 0.2% in India) by the Government of India. *May 2015*
- **Teaching Assistant**: Conducted tutorial sessions, and graded exams for a class of about 120 students
  - Computer Programming and Utilization (CS 101) - Prof. Supratim Biswas *Jan 2021 - May 2021*
  - Logic in Computer Science (CS 228, CS 228M) - Prof. Ashutosh Gupta & Prof. Krishna S *July 2019 - May 2020*

Skills

Programming Python, C/C++, Java, JavaScript, Bash, SQL, MATLAB, Prolog, LaTex, Git
Data Analysis and Machine Learning Pandas, Numpy, PyTorch, CUDA, Keras, SpaCy, NLTK, Grafana