# DRUVA KUMAR GUNDA

#### **EDUCATION**

### Texas A&M University, College Station

January 2023 - December 2024

Master of Science in Computer Science, GPA 4.0/4.0

College Station, TX

Courses: Algorithms, Operating Systems, Parallel Computing, Network Security, Software Security, Information Retrieval, Data Mining.

### National Institute of Technology Raipur

July 2017 - May 2021

Bachelor of Technology in Computer Science and Engineering, GPA 8.75/10

Raipur, India

### TECHNICAL SKILLS

Languages: C, C++, Python, bash, Java, JavaScript, Typescript, SQL, Ruby on Rails, HTML, CSS

Libraries: Jquery, NodeJs, Boost, Numpy, Pandas, Matplotlib, Scikit-Learn, Seaborn

**Frameworks:** Keras, TensorFlow, PyTorch, PyTorch DDP, PyTorch Lightning, torchrun, fast.ai, AngularJs, Jasmine, SonarQube. **Tools:** Docker, Kubernetes, BigQuery, Looker Studio, Singularity, Github, Perforce, Postman, Slurm Manager, Azure, Git

#### WORK EXPERIENCE

SLB May 2024 - August 2024

Digital Technology Backend Intern

Houston, TX

- Engineered and implemented data-driven solutions using SQL, BigQuery, and Looker Studio to optimize cloud resource utilization and generate actionable insights. Accelerated usage cost analysis processes by 8x through creating interactive dashboards, streamlining operations, and improving efficiency.
- Leveraged **cloud** technologies (**Kubernetes, Virtual Machines**) to analyze microservices application performance and identify **cost optimization** opportunities. Collaborated effectively with cross-functional teams to design and deliver a cost management solution aligned with business objectives.

# Texas A&M University - High-Performance Resource Computing (HPC)

August 2023 - present

Graduate Research Assistant

College Station, TX

- Successfully executed performance assessments across 4 Texas A&M University supercomputers. Initiated job execution on 15 Slurm cluster nodes using Singularity images to support Large Language Models such as BERT and GPT-2.
- Utilized and scaled three distributed deep learning strategies Data, Model, and Tensor Parallelisms across **30** GPUs in single and multi-node configurations, demonstrating expertise in optimizing model training and execution.

Factset April 2022 - December 2022

Software Engineer- II

Hyderabad, India

- Improved API latency by 50 ms through strategic endpoint development (CPP and Python) and elimination of data hub locks, enhancing overall system performance and user experience.
- Developed a securities modeling application that drove a 2x increase in Customer Retention, demonstrating expertise in creating high-impact software solutions that drive business growth.
- Successfully migrated Factset Deployment pipelines from Jenkins to GitHub Actions, achieving a **60**% reduction in application deployment time and streamlining development workflows for increased efficiency.

Software Engineer- I June 2021 - March 2022

- Created an AngularJs library that significantly reduced dependencies by **4x**, streamlining application interactions and improving overall system efficiency and maintainability.
- Successfully enhanced application builds for modeling interest rate shocks, resulting in a 2x acceleration of UI rendering. Leveraged the JAMS grid scheduler to initiate portfolio analytics and actuarial scenario jobs, leading to a 30% increase in customer satisfaction.

## **PROJECTS**

### **BeatBuddy**

• Constructed a **multimodal search engine** that accepts queries via text and audio inputs. Implemented **COLBERT** for text-based search and K-Nearest Neighbors (KNN) algorithm for song recommendations.

# CodeJudge

• Built a Ruby on Rails web application for automated student coding assignment grading, factoring in the number of attempts and their types. Drove a 70% decrease in the need for manual assessment in determining problem difficulty levels.

#### LEADERSHIP EXPERIENCE

- Worked as mentor for k12 students in **GenCyber Camp** at Texas A&M University (2023).
- Assisted for Intelligence Processing Units (IPU) tutorial at PEARC Conference, Portland (2023).
- Functioned as Executive Member in **Go Green Committee** at NIT Raipur (2017-2020).