# Srikar Talluri

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#### **EDUCATION**

#### University of California, Berkeley

May 2025

Bachelor Degree in Computer Science

Berkeley, CA

Bachelor Degree in Applied Mathematics

- **GPA**: 3.92
- Selected Coursework: Algorithms, Database Systems, Operating Systems, Deep Learning, Optimization Models, Computer Graphics, Probability Theory, Discrete Math, Linear Algebra, Real/Complex Analysis, Numerical Analysis
- Activities: Math Undergraduate Student Association, Competitive Programming, Berkeley Debate, Pickleball Team

# Honors & Awards

**Honors:** Upsilon Pi Epsilon (CS Honors fraternity), Math Honors Program (graduate classes + thesis), Dean's List **Awards:** Google Code Jam (Top 500), International Collegiate Programming Contest/ACM ICPC Top 15 Division 2

Certifications: Postman API Design Fundamentals, AWS Certified Cloud Practitioner

# WORK EXPERIENCE

#### Machine Learning Engineering Intern

May 2024 – Aug 2024

Talroo

Austin, TX

- Fine tuned ensemble transformer models for job requirement extraction in TensorFlow at 0.98 f1, an increase by 0.26 f1
- Designed scalable, distributed NVIDIA Triton Inference Server with 120 tps per GPU with load balancing on instances
- $\bullet$  Boosted client conversion rate from 4% to 6% by designing a model-serving RESTful API for the core search platform

### **Data Engineering Intern**

Jun 2023 - Aug 2023

Vogue Magazine

New York City, NY

- Processed 60+ petabytes of daily user data by building real-time multi-threaded Spark/Kafka pipelines
- Deployed parallelized stream architecture in Terraform to ingest 2,000,000+ subscriber data, achieving 4x speedup
- Developed service to smart-ship overstock, earning potential of \$175k+; won 1st place in intern pitch competition

# Software Engineering Intern

Oct 2022 – May 2023

SC Electric Automation

Alameda, CA

- Deployed distributed communication networks in C++ reducing electric grid latency by 67ms with real-time processing
- Developed production-scale React web application on 200+ GPS devices with TCP/IP and UDP networking protocols

#### Software Engineering Intern

Jun 2022 – Aug 2022

ANB Systems

Houston, TX

- Built Recognition & Reduction service to hide sensitive data on 500+ documents with OCR detection for client security
- Designed GraphQL API for distributed data retrieval, optimizing query efficiency, reducing API response time by 83%

#### Selected Projects

ChessFormer | • Repo | Python, PyTorch, GPT Transformer Models, Onnx, Lichess API

- Designed searchless transformer-based chess agent with 1900+ rating trained on 2,000,000+ board states with pytorch
- Achieved 92% accuracy when fine-tuned to predict expert moves from PGN datasets with integrated move legality
- Served quantized model using Onnx and linked to bot API for open play on Lichess servers

RustSim | Repo | Rust, Python, PyO3, Rayon, Numpy

- Designed physics engine in Rust to simulate physics problems: kinematics, n-body problem, fluid dynamics, etc
- Wrote parallelized versions of Range-Kutta & Navier Stokes resulting in 70% speedup and 40x speedup from Python
- Built robust Python wrapper library around Rust core using PyO3 enabling seamless integration with Python scripts

PintOs |  $\square$  Repo | C++, C, x86 assembly, Docker, Bochs

• Developed operating system kernel in C (without stdlib) that implements preemptive multi-threading, synchronization primitives, advanced priority scheduling, and system calls.

# TECHNICAL SKILLS

Areas: Machine Learning, Model Fine-Tuning, Data Engineering, Distributed Systems, Backend Development

Languages: Python, C/C++, Java, JavaScript, TypeScript, Scala, SQL, Rust

Tech Stacks/Tools: AWS, Google Cloud, Docker, Django, Next.js/React, REST, gRPC, PostgreSQL

Libraries: Pytorch, Tensorflow, Pandas, SKLearn, MatPlotLib, OpenCV, Selenium, OpenGL, GLSL