Jithesh Jalapothu

Seattle, WA | jitheshjalapothu@gmail.com | +1 (669)-455-8625 | http://linkedin.com/in/jithesh-jalapothu-17a184202/ | Portfolio

Summary

Software Engineer with hands-on experience in frontend development and automation. Recognized for building intuitive, the engineer designs crucial interfaces using contemporary web technologies to enable performance optimization. Demonstrated experience in working with agile teams at quick speeds and shown excellence in improving system performance as well as user interface usability.

SKILLS

Programming Languages: Python, JavaScript, SQL, YAML.

Frameworks & Libraries: Angular, React, Django, HTML, CSS, PyTorch, Matplotlib, torchvision, NumPy, tiktoken.

Tools & Technologies: AWS, GIT, Jenkins, CI/CD Pipelines, Docker, Selenium, Stripe API.

Software Development: Backend & Frontend Engineering, Deep Learning model development (CNNs, TinyVGG), Computer Vision (image preprocessing & augmentation), AI/ML (Transformative Architecture).

PROFESSIONAL EXPERIENCE

Creative Funding Agency, California, USA – Technical Engineer — **July '25 - November '25**

- Enhanced user experience by integrating Spotify's developer API, enabling real-time access to artist information such as popularity, genres, top tracks, and listener metrics.
- Designed and implemented dynamic valuation algorithms to estimate catalog worth based on real-time popularity and engagement metrics, generating ranges such as $800K–$1.2M in projected catalog value and $250K/year in estimated revenue per artist.
- Reduced manual effort in artist valuation by 90% by automating financial projections using Spotify data, replacing spreadsheets with API-driven logic.
- **Technologies:** JavaScript, JSON, React, HTML, CSS.

Innova Solutions, Hyderabad, India - *Software Engineer* — **June '22 – May '23**

- Spearheaded the development of a cutting-edge Time & Expense management interface using Angular, enhancing platform usability and boosting user satisfaction by 30%.
- The process automation scripts written have reached a level of efficiency which resulted in a 40% reduction of manual work.
- Employed SQL for database management and backend development, ensuring high-level performance across the application.
- Performance testing resulted in a 20% reduction of application load times through optimized load time and scalability improvements.
- **Technologies:** SQL, JavaScript, YAML, TypeScript, Angular, HTML, CSS, Jenkins, AWS, Selenium CI/CD Pipelines.

Manac Info Tech (P) Ltd, Hyderabad, India - *Web Development Intern* — **March '21 – May '21**

- Acquired and honed expertise in HTML, CSS, and JavaScript, laying a strong foundation for modern web application development.
- Collaborated with senior developers to contribute to responsive, user-focused web applications.
- **Technologies:** HTML, CSS, JavaScript, Ajax.

Education

Seattle University, Seattle, WA — **September'23 - June'25**
Master of Science in Computer Science

Sree Vidyanikethan Engineering College, Tirupati, India — **June '18 – May '22**
Bachelor of Technology in Computer Science

Projects

Generative Pre-trained Transformer (GPT – Mini) (GitHub) — **August '25 – October '25**

- Built core components including multi-head self-attention, masked attention, positional embeddings, and transformer blocks.
- Implemented a transformer-based language model from scratch, replicating GPT-2 small architecture (12 layers, 12 heads, 768-dim embeddings).
- Integrated tiktoken for GPT-2-style tokenization and trained model on sample text corpus using PyTorch DataLoader
- Demonstrated knowledge of the fundamentals of deep learning, including dropout, weight sharing, causal masking, and attention mechanisms.
- **Technologies**: Python, PyTorch, NumPy, tiktoken

E-commerce Platform (GitHub) — **January '24 - March '24**

- Engineered a robust and scalable E-commerce platform, leveraging Django to handle high-traffic scenarios and ensure efficient data management.
- Integrated Stripe API for payment processing, enabling a 100% increase in available payment option.
- Engineered a robust and scalable E-commerce platform, leveraging Django to handle high-traffic scenarios and ensure efficient data management.
- Delivered a visually appealing, highly responsive frontend with HTML and CSS, achieving a 25% faster real-time interaction through Ajax.
- **Technologies:** Python, HTML, CSS, Ajax, Django.

Food Identifier(GitHub) — **March '24 – May '24**

- Developed a TinyVGG-based CNN from scratch to classify food images, achieving 92% test accuracy on the custom dataset.
- Improved model performance by 28% through hyperparameter tuning (learning rate, batch size, optimizer choice).
- Enhanced dataset quality using torchvision augmentations, reducing overfitting by 15% compared to baseline.
- Implemented data augmentation techniques to increase dataset diversity and improve the model robustness and generalization capability by reducingoverfitting.
- **Technologies:** Python, PyTorch, Torchvision, NumPy, Pandas, Matplotlib, Google Colab.

Re-Recipe (GitHub) — **September '23 – December '23**

- Integrated Google Authentication to enhance user security and streamline logins, reducing unauthorized access by 85% users.
- Engineered responsive web applications with Angular and TypeScript, creating reusable components that accelerated development by 40% and improved performance by 30%.
- Built user-centric recipe features such as Add to Favorites and Create Your Own Recipe, enhancing platform interactivity and encouraging content contribution.
- **Technologies:** HTML, CSS, Angular, TypeScript, JavaScript, MongoDB.

ACHIEVEMENTS

- **International Mathematics Olympiad**: Ranked 775 at the state level, achieving an international ranking of 5858.

CERTIFICATIONS

- Coursera – Introduction to Machine Learning (Link)
- National Conference (NCKITS) – (Brain Disease Classification Age Estimation From MRI).
- Program Essentials in Python (NetworkingID: 1027807749)