PROFILE

Experienced professional with over 7.5 years in advanced technology, application development, system design, GenAI and cloud technologies. Seeking to leverage my skills in a Research and Development role to drive innovation and engineering excellence at your esteemed company. Committed to contributing to cutting-edge solutions and growth.

EDUCATION

Shri Madhwa Vadiraja Institute of Technology & Management, Udupi (VTU)

2013-17 (B.E, Computer Science)

CONTACT

PHONE:
+91 7204260320
EMAIL:
shreerajbhat@gmail.com

COUNTRIES TRAVELLED

Singapore, Thailand & Indonesia

LANGUAGES KNOWN

English, Kannada, Hindi & Tulu

LinkedIn -
https://www.linkedin.com/in/shreeraj-bhat-62703268/

Git - ***https://github.com/shreeraj04***

SHREERAJ BHAT

Associate Technical Lead

WORK EXPERIENCE

Tetherfi – Associate Technical Lead
July 2024 – Current

- Demonstrated **advanced monitoring and alerting** capabilities by integrating tools like Sentry, Grafana, and SonarQube for enhanced performance insights.
- Enhanced the **gadget detection** module in the SWFH solution, improving accuracy and efficiency by fine tuning **YOLO** models using custom dataset.
- Developing a **Speech-to-Text** solution on edge devices using models like Whisper, focusing on optimized performance. Worked on training the Whisper model to accommodate Singlish language.
- Developed an **LLM wrapper** enabling scalable **summarization** and **sentiment analysis**, with extensibility for new models and use cases.
- Organized and led "Tetherfi Innovate", an internal hackathon fostering innovation and collaboration.
- Actively contributed to **R&D initiatives** as a key decision-maker, driving innovation and strategic advancements across projects.

Cactus Communications - Senior Software Engineer
July 2022 – July 2024

- **Resolved complex product issues for Hubble,** including reducing processing time by 60% for the error marking module and introducing PDF file support through Mathpix integration.
- **Played a key role in developing comprehensive solutions** by participating in a hackathon with GCP Vertex AI and architecting the **Integrity Checks solution**, which now handles thousands of requests simultaneously and supports bulk ZIP file uploads.
- **Extensively utilized AWS Cloud services for both Hubble and Integrity Checks solutions**, demonstrating hands-on experience with cloud architecture and integrating live GPT/LLM models (OpenAI and Minotaur). Led the development of the Integrity Checks solution entirely on AWS.
- **Mentored freshers and interns**, fostering a collaborative environment to nurture talent and drive skill development.

Tetherfi – Senior Software Engineer – R & D
July 2021 – June 2022

- **Led multidisciplinary projects in human-computer interaction and face authentication,** including developing a proof of concept for an eKYC solution with OCR, achieving **75%-80%** accuracy for Aadhaar cards, and handling **300-400** requests per second for face authentication.

- **Managed and led a team** of 1-3 members, fostering a collaborative and productive work environment.
- **Conducted market research and iteratively enhanced product features**, aligning them with customer feedback and market needs.

Tetherfi – Software Engineer – R & D
July 2017 – June 2021

- **Evaluated project plans and proposals** to assess feasibility, ensuring alignment with strategic objectives.
- **Applied theoretical expertise** and innovation to create or apply new technology, driving advancements in various domains.
- **Developed performance standards**, evaluated work against established criteria, and contributed to multidisciplinary projects spanning augmented reality, human-computer interaction, and face authentication.

Tetherfi – Junior Software Engineer
July 2017 – June 2018

- **Modified existing software to rectify errors**, adapt to new hardware, and enhance overall performance.
- **Analyzed user needs and software requirements**, providing optimal solutions through effective problem-solving and innovative thinking.

TECHNICAL SKILLS

- **Programming Languages:**
  - Proficient in Python
  - Prior experience in C# .NET, JavaScript and NodeJS.
- **Technologies, Frameworks and Libraries:**
  - Skilled in Docker, Flask, FastAPI, Sentry, boto3, unittest, GenAI, Prompt Engineering, transformers, object detection, speech to text, GenAI and related technologies.
  - Familiar with Gunicorn, aiohttp, Grafana Loki, ELK, Windows Services, MVC, WebSockets, RASA, OCR, ORM, Jenkins, and related technologies.
- **Tools:**
  - Proficient in GIT, VS Code, Postman, Visual Studio, MSSQL Server, and PgAdmin.
  - Familiar with Terraform (IaC)
- **Operating System:**
  - Experienced with Linux distributions (Redhat, Ubuntu) and Windows.
- **Databases:**
  - Proficient in DynamoDB.
  - Prior experience with PostgreSQL, MSSQL, and SQLite.
- **Cloud Platforms:**
  - Extensive experience with AWS, including building monolithic, serverless, and microservice architectures.
  - Some exposure to Google Cloud Platform (GCP).
- **Other Technologies**
  - Familiarity with Redis.
  - Personal interest and understanding in AI/ML concepts.

FEW MAIN PROJECTS WORKED

1. **Hubble – CACTUS COMMUNICATIONS**
   - *Role:* Developer
   - *Technologies:* Python, AWS
   - *Description:* Manuscript/research paper correction and suggestion tool with an extensive AWS architecture. Modular design allows customization based on requirements.
2. **Integrity Checks – CACTUS COMMUNICATIONS**
   - *Role:* Solution Lead, Developer

- *Technologies:* Python, AWS, Terraform
- *Description:* Comprehensive document validation tool featuring independent checks for publishers with some checks using LLM. Notable for its scalable AWS architecture. Led the design of bulk support functionalities.

3. **Generative AI Features (Copilot) – CACTUS COMMUNICATIONS**
   - Role: Developer
   - Technologies: Python, GenAI, AWS
   - Description: Contributed to a Generative AI research assistant solution for Paperpal (paperpal.com) users, which includes various features. Some of the features I contributed to include Title Generation, Summarization, and more, enhancing user productivity.

4. **Face Authentication – TETHERFI TECHNOLOGIES**
   - *Role:* Researcher, Developer
   - *Technologies:* Python, Open-Source libraries
   - *Description:* Utilized open-source DLIB model in Python to develop a robust face authentication system. Implemented for various use cases, including secure application logins.

5. **eKYC Solution – TETHERFI TECHNOLOGIES**
   - *Role:* Developer
   - *Technologies:* Python, JavaScript
   - *Description:* Proof-of-concept application targeting banks, integrating OCR technology for Aadhar Card scanning and face authentication for enhanced security.

6. **OCM (Omni-Channel Manager) – TETHERFI TECHNOLOGIES**
   - *Role:* Developer
   - *Technologies:* C# .NET, JavaScript
   - *Description:* Web admin and analytics application seamlessly integrated across multiple channels. Key involvement in Avaya's Autodialer projects, including Telesales and Collections, with API integration for Avaya's POM (Pro-Active Outreach Manager).

7. **Conversational AI bot & Hidden Agent – TETHERFI TECHNOLOGIES**
   - Role: Developer
   - Technologies: Python, RASA
   - Description: This is a machine learning framework based on RASA for automated text and voice-based conversations and a hidden agent app to train the model on the go.

ACHIEVEMENTS

- Selected & participated in the National Level Smart India Hackathon organized by Govt. Of India in 2017 during B.E final year.
- Honoured with the "Always On" award during Tetherfi's 10th-year anniversary program in October 2019. Recognized for proactive task completion ahead of deadlines and exceptional responsiveness with peers.
- Received the "Best Project" and "Best Team" award at Cactus during the Quarterly Awards and Annual Awards respectively.

All information in this resume is true and correct to the best of my knowledge and belief.

Shreeraj Bhat