# Abin Simon

🌐 meain.io
✉ mail@meain.io
○ github.com/meain
in linkedin.com/in/meain

I am an accomplished Software Engineering professional with multiple years of experience in designing and developing scalable platforms. My expertise lies in systems design for high-throughput systems, and I possess extensive knowledge of the technology stack employed in popular SAS solutions. Throughout my career, I have worked with diverse technologies, providing me with a wealth of experience and exposure to varied domains. In addition to my professional pursuits, I actively contribute to the open source community and maintain multiple projects focused on enhancing developer experience. I also share my insights on developer tooling in my blog, serving as a platform to disseminate my research and knowledge.

## EXPERIENCE

**InfraCloud Technologies**                                       Nov 2021 – present
Software Engineer                                                       Pune, India

**Primary Technologies/Stack:**  Golang, Kubernetes, JavaScript
- Designed and implemented a Zero Trust access control solution for Kubernetes clusters.
- Contributed to an open-source client project focused on Kubernetes access management, fostering a vibrant community around it.
- Developed a user-friendly web dashboard for Kubernetes access management and streamlined shell access for customers.
- Improved multiple build/release pipelines, enhancing the developer experience.
- Developed on an open-source data backup solution for Microsoft 365 which simplifies having a fully encrypted, incremental backups onto object storage like s3.

**Saama Technologies**                                           July 2018 – Nov 2021
Research Engineer                                                     Chennai, India

**Primary Technologies/Stack:**  Python, Airflow, Pandas, Postgres, Kubernetes
- Developed a framework for an internal NLU engine deployed for multiple client environments, simplifying the querying and visualization of medical analytics data.
- Operationalized several in-house ML/DL models, resulting in a more efficient and responsive architecture.
- Built scalable solutions for training and inference pipelines for our in-house AutoML solution using Kubernetes.
- Contributed to the creation of a cloud IDE platform that provides data scientists with an always-available online IDE with synced user data, speeding up development.
- Built a scalable data transformation pipeline for processing large volumes of medical record data, resulting in faster data processing times.

**PYCON 2019**                                                      November 2019
Dev Sprint                                                            Chennai, India

- Contributed to the IndicNLP community by hosting a Dev Sprint, fostering collaboration and progress towards Natural Language Processing for Indic languages.
- Helped empower community members by sharing expertise in Python, Open Source Software, and Natural Language Processing at a training session.

**Saama Technologies**                                    Jan 2018 – June 2018
Engineering Intern                                              Chennai, India

  **Primary Technologies/Stack:**   Python, JavaScript, React, Tensorflow
  - Developed a chat interface for DaLIA, an in-house chatbot engine, utilizing JavaScript and React to provide both standalone and embeddable user interfaces.
  - Created Flow Builder, a user-friendly drag-and-drop low-code interface for building closed domain chatbots.
  - Designed and built a prototype for an experimental blockchain-based patient consent platform.

**Datalog.ai**                                            July 2016 – Oct 2017
Engineer Intern                                      San Francisco, CA (Remote)

  **Primary Technologies/Stack:**   Python, JavaScript, React
  - Developed an embeddable and standalone user interface (UI) for the chatbot MyPolly.
  - Created a flexible framework to connect the chatbot with various messaging platforms, including Slack, Facebook Messenger, and Alexa.

# EDUCATION

**CUSAT**
Cochin, Kerala, India
BTech in Computer Science
2014 - 2018

**Vijayagiri Public School**

Thrissur, Kerala, India
Higher Secondary (XI - XII)
2012 - 2014

# SKILLS

**Languages**
Golang, Python, Javascript, Rust, Bash

**Tools**
Docker, Kubernetes, Airflow

**Databases**
Postgres, MongoDB, SQLite, Redis

**Platforms**
Google Cloud, AWS

# PROJECTS

**Paralus**  Zero trust access management for Kubernetes
Paralus is a Kubernetes infrastructure management tool that offers controlled, audited access. It features just-in-time service account creation and user-level credential management, which seamlessly integrates with your RBAC and SSO systems. With Paralus, you can securely manage access to your Kubernetes infrastructure, ensuring compliance and efficiency.

**Corso**  Free, Secure, and Open-Source Backup for Microsoft 365
Corso is an open-source tool designed to protect Microsoft 365 data through secure and efficient backup of all business-critical information to object storage. This tool comes equipped with features such as built-in encryption, deduplication, and compression, as well as the ability to perform

incremental backups to reduce storage costs. With Corso, users can trust that their important data is backed up and safeguarded, while also benefiting from cost-effective storage solutions.

**PACE**  Complete IDE in the cloud
As the project lead, spearheaded the implementation of a cloud-based IDE with automatic version control and full user traceability, which served as a critical component in managing dynamic user codebases as part of a broader data transformation pipeline. This tool played a pivotal role in significantly increasing efficiency and accuracy across multiple teams, and I ensured its optimal utilization to achieve maximum benefits.

**AutoML**  Automatic ML models on tabular data
Automated tool that helps to generate structured data pre-processing pipeline, and an ML model for classification or regression tasks. Training and deployment of models were managed an scaled through Kubernetes which helped us build cheaper and more reliable model serving platform.

**SAM**  Smart Auto Mapper
Developed a user-configurable data transformation pipeline for medical standards, processing high volumes of data using Pandas and Postgres. Oversaw the successful scaling of the pipeline with Airflow and Kubernetes, resulting in improved efficiency and reduced processing times. The pipeline enabled accurate processing of large amounts of medical data, meeting the demands of the industry's strict standards.

**DaLIA**  A Virtual Assistant for Pharma
As a Full Stack developer, I played a key role in developing a closed-domain Virtual Assistant Framework using NLP. I managed both the project framework and UI components, ensuring seamless integration and a user-friendly design. Through this project, I demonstrated proficiency in NLP, Full Stack development, and project management.

**Flow Builder**  Low-code bot builder UI
Developed a simplified Drag-n-Drop UI for building and deploying chatbots usging the DaLIA framework, enabling non-technical users to easily create chatbots. This UI removed complexities of traditional chatbot development, resulting in wider usage and adoption of the framework.

**MyPolly**  Chatbot framework
Developed an open domain programmable chatbot framework that allowed users to create and customize chatbots for their websites. Helped ensure that the resulting chatbots were easily embedded onto client webpages. Achieved a high level of client satisfaction by providing a user-friendly interface that allowed clients to easily program and deploy their own chatbots.

In addition to my primary responsibilities, I actively engage in a diverse array of open source endeavors, with a particular focus on developer tooling, as evidenced by my contributions to various projects showcased on my GitHub profile.