

# JOEL LOUIS MENACHERY

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## EDUCATION

### M.S, Information Technology

August 2023 - April 2025

Arizona State University, Tempe, AZ

4.0 / 4.0 GPA

Relevant coursework: Big Data, Data Visualisation, Tableau, Project Management

### B.Tech, Computer Science and Engineering

August 2018-June 2022

Christ University, Bangalore, Karnataka, India

3.17 / 4.0 GPA

Relevant coursework: DBMS, Dynamic Programming, Object Oriented Programming, Machine Learning

## SKILLS

**Languages:** Python, Java, JavaScript, TypeScript, Dotnet, C, C++, SQL, Kotlin

**Technology:** AWS (EC2,S3, IAM, Lambda), Firebase (Auth, Firestore, Functions), Github, Docker, MongoDB(NO-SQL DB) , Postgress(SQL DB)

**Frameworks:** Flask-Restful, Django, NextJS, NumbPy, Pandas, Keras, Pytorch

## RESEARCH / CONFERENCE

### 2023 IEEE CONFERENCE ON CONTEMPORARY COMPUTING AND COMMUNICATION (InC4)

June 2023

Convolutional Neural Network, ResNet50, DenseNet, MobileNet, Keras Framework

- Investigated deep learning methods for early brain tumor detection using MRI images.
- Compared ResNet50, DenseNet201, Inception V3, and MobileNet models, finding ResNet50 most accurate with 85.30% training accuracy. [Read More](#)

## EXPERIENCE

### Legato Health Technology, BLR - IND: Associate Software Developer

July 2022 – November 2022

- Architected robust APIs with **Express.js** and **Flask Restful** frameworks, reducing manual intervention by 30%.
- Implemented **Nodemailer** for automated email notifications, achieving a 20% increase in API response time.
- Integrated Google's **Perspective API**, reducing moderation time by 40% and enhancing platform security.
- **Kafka messaging system**, improving real-time data processing capabilities.
- **Closed 15 pull requests**, contributing to overall system performance and functionality improvements.

### Tata Communication, Mumbai - IND: Software Developer Intern

February 2021 - March 2021

- Revamped the website UI built on **Next.js**, improving user experience and interface design.
- Upgraded website authentication system from **session-based to token-based using JWT tokens**, enhancing security and user authentication processes.

### Prodevans, BLR - IND: Software Developer Intern

March 2020 - June 2020

- Spearheaded a team of 4 developers in creating an ETL (Extract, Transform, Load) tool using **Python** and **pandas**.
- Developed the tool to extract data from CSV files at specific intervals and automated transfer to an S3 bucket, enabling client access for download.

## PROJECTS

- **SparkConnect:** An open-source project, for people to connect and send information, automation done through web-scraping by Web extension.(Webhooks, APIs, NextJs, Flask-RestFul, MongoDB)
- **Kitsu:** An open-source video Streaming application, made for watching anime, with string search capability and History saving.(Kotlin, Model-View-Controller, coroutine, Exoplayer)
- **Doc Detection:** Created a website that has where you upload doc to extract content using OCR. (Tesseract, Pytorch, pandas, numppy, Django, Machine Learning)
- **Face Detection:** Using the capability from your laptop webcam for face identification.(OpenCV, Tensorflow, Pandas, Numpy ,Deep Learning)
- **Homomorphic Encryption:** Demonstrated a Project for homomorphic Encryption, using Microsoft SEAL where text can be manipulated even after they are encrypted if you have the write key with out decrypting the data.(C++)