

# Ibraheem Alsaghier

ibraheemsag@gmail.com | +966560010643 | Thuwal, Saudi Arabia

## EDUCATION

KAUST | MS COMPUTER SCIENCE

Thuwal, Saudi Arabia | Aug 2023 - May 2025

UNC, CHAPEL HILL | BS COMPUTER SCIENCE

Chapel Hill, NC | Sept 2019 - May 2023

## RELEVANT COURSEWORK

AI & ML

Deep Learning for Visual Computing, Deep Generative Modeling

COMPUTER SYSTEMS

Computing Systems and Concurrency, Advanced Distributed & Networked Systems

## RESEARCH EXPERIENCE

KING ABDULLAH UNIVERSITY OF SCIENCE AND TECHNOLOGY | RESEARCH ASSISTANT  
Saudi Arabia | May 2024 – Dec 2024

Thuwal,

- Developed benchmarks for evaluating agentic AI's fault-diagnosis capabilities, leveraging tracing, logging, and metric collection on microservice applications.
- Built orchestration tools in Python/Go for controlled fault injection in microservices, streamlining debugging processes.
- Engineered an automated AI agent achieving accurate root cause analysis in controlled experiments.

## LEADERSHIP EXPERIENCE

KGSP ALUMNI COUNCIL | OUTREACH CHAIR

Nov 2023 – Nov 2024

- Coordinated and hosted alumni events, increasing participation by X
- Executed strategic outreach campaigns boosting alumni engagement.

## SKILLS

PROGRAMMING LANGUAGES

Python, Java, C, Go

PYTHON MODULES

Pytorch, Pandas, Numpy, Scipy

## PERSONAL PROJECTS

AFFECTIVE IMAGE MODIFICATION | AI-POWERED EMOTION-BASED IMAGE EDITING

- Developed a pipeline integrating a Large Language Model (LLM) and a diffusion model to modify images based on user-specified emotions (e.g., joy, sadness, fear, surprise, calm).
- Designed the system to analyze and alter scene elements, enhancing the emotional impact of the image.

MOVIE RECOMMENDATION SYSTEM WITH DEEPPFM (IN PROGRESS) | DEEP LEARNING FOR PERSONALIZED RECOMMENDATIONS

- Built an end-to-end recommendation system utilizing the Deep Factorization Machine (DeepFM) architecture for personalized movie suggestions.
- Integrated user and movie metadata from MovieLens and IMDB to improve collaborative and content-based filtering.
- Currently optimizing scalability and generalization to larger datasets for improved recommendation accuracy.

PERSONAL PORTFOLIO (IN PROGRESS) | REACT-BASED INTERACTIVE DEVELOPER PORTFOLIO

- Designed and built a responsive personal portfolio website using React to showcase projects and skills.
- Implementing interactive UI elements for project demos and blog integration.