# Asif Zubayer Palak

asifpalak@gmail.com | https://linkedin.com/in/acesif | github.com/acesif

## Research Interests

Natural Language Processing, Large Language Models, Code Generation Software Engineering, AI4SE

## EDUCATION

**BRAC** University

Jan. 2020 - Dec. 2023

Bachelor of Science in Computer Science and Engineering

Dhaka, BD

CGPA: 3.76 / 4.00

Relevant Coursework:

Natural Language Processing, Data Structures & Algorithms, Operating Systems, Linear Algebra & Fourier Analysis

Certifications:

Unsupervised Learning, Recommenders, Reinforcement Learning

Advanced Learning Algorithms

Supervised Machine Learning: Regression and Classification

Generative AI with Large Language Models

#### Research Experience

- Working on "PROBE: Provenance for Replay OBservation Engine" with Samuel Grayson (PhD @ UIUC) - PROBE4RSE: Provenance Replay/Observation Engine for Research Software Engineers
- Worked on validating Java-to-Python code translation using original tests through language interoperability with GraalVM

(Supervised by Dr. Darko Marinov)

• Worked on Pattern Recognition to enable shoppers to find clothing products by matching their doodle sketches to products online

(Supervised by Dr. Farig Yousuf Sadeque)

#### Publications

- Doodle2Clothing: A Clothing Design Recognition and Searching Model from a Doodle Drawing Published - INTCEC 2024 DOI: 10.1109/INTCEC61833.2024.10602879
- GlueTest: Testing Code Translation via Language Interoperability Accepted - ICSME 2024 (NIER Track)

## Industry Experience

## Jr. Software Engineer

Jun. 2024 - Present

Karooth IT

bKash Limited

Dhaka, BD

- Developed a Helpdesk application with Spring Boot and Angular
- Developed RESTful APIs for the Grievance Redress System

## Software Engineer Intern

Jan. 2024 - May 2024

Designed and developed a lunch booking and management system for subscribers and vendor.

Dhaka, BD

- Developed RESTful APIs for the microservices with roles-permission management.

# Technical Skills

Languages: Java, Python, SQL (MySQL), JavaScript, Typescript, HTML/CSS

Frameworks: SpringBoot, Angular, PyTorch Libraries: pandas, NumPy, Matplotlib, scikit-learn