### VAHAGN GHAZARYAN

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### **OVERVIEW**

A goal-oriented and highly motivated junior majoring in Software Engineering at Shanghai Jiao Tong University, an institution globally renowned for its high academic standards. Having a strong background in mathematics and software design, I've effectively contributed in a team to develop AI-based ETL pipelines. I am proficient in executing intensive systems software labs and multi-faceted software engineering projects, showcasing strong problem-solving abilities and teamwork skill both individual and collaborative settings. Committed to continuous personal and professional development, I am well-prepared to excel in challenging software engineering roles.

#### **EDUCATION**

Shanghai Jiao Tong University, Shanghai, China

September 2021 - July 2025

B.Sc. in Software Engineering

Shanghai Normal University, Shanghai, China

September 2020 - July 2021

One-year intensive Chinese language course before major studies at SJTU

#### PROFESSIONAL EXPERIENCE

#### Cognaize, LLC, Yerevan

September 2018 - September 2020

Data Engineer at Data Science Team

• Data Integration

Helped the team with data extraction and preprocessing, employing tools for parsing from multiple sources.

cloudstorageio

Developed a user-friendly interface for diverse storage solutions such as AWS S3 and Google Cloud Storage.

• Closely collaborated with teammates on co-dependent functionalities

# **PROJECTS**

#### • Online Shop Platform

Developed a comprehensive online shopping platform with extensive tooling and frameworks. Implemented React.js for the front-end and Spring Boot for the back-end. Managed structured and unstructured data using MySQL and MongoDB. Utilized Kafka for asynchronous messaging and Redis for efficient caching. Employed Neo4j for graph-like data structures, Apache Spark for keyword count tasks, Nginx for load balancing and Docker for containerization.

# • Distributed File System

Engineered an inode-based, distributed file system in C, while emphasizing concurrency, atomicity, and crash recovery features for robustness.

# • Raft and Map Reduce

Implemented the Raft consensus algorithm and the MapReduce programming model in C by following their respective academic papers.

#### • Tiger-Compiler

Developed a complete compiler for the Tiger programming language in C++, covering all key stages from lexical analysis to register allocation.

# • Video Classification

Created a Video Classification System using Convolutional Neural Network (CNN) and Long Short-Term Memory (LSTM) networks.

# • Event Management Platform

In a collaborative class project, led the development of a school event management website, guiding the project from inception to completion while upholding fundamental software engineering and project management principles.

### • Computer System Labs

Completed a series of complex labs, where I reverse-engineered a binary program, simulated attacks using buffer overflow bugs, build a simulator and assembler for the Y86-64 instruction set, developed a simple web proxy and Unix shell.

### **SKILLS**

Languages: Armenian (Native), English (Fluent), Russian (Advanced), Chinese (Advanced)

Programming languages and Tools: C, C++, Docker, Python, React JS, Java, SQL, Apache Spark

Professional Attributes: Adaptability, Time Management, Public-speaking