

EDUCATION

UNIVERSITY OF CALIFORNIA
SAN DIEGOMS IN COMPUTER SCIENCE
Grad. June 2025NATIONAL UNIVERSITY OF
SINGAPOREBENG IN COMPUTER ENGINEERING
Grad. June 2020

SKILLS

Experienced:

Java • Golang • Python • C

Familiar:

PyTorch • Tensorflow • SQL • Kafka

LINKS

Website:// [archanapradeep](#)Github:// [archanapradeep](#)LinkedIn:// [archanapradeep](#)

TEACHING

Python for Data Science (DSC207R)

Fall 2023

Programming Methodology (CS1010)

Fall 2018

Embedded Systems Design Project
(CG3002, CG4002)

Fall 2019, Spring 2020

COURSEWORK

Probabilistic AI and Reasoning

Advanced Computer Vision

Natural Language Processing

Graduate Network Systems

Intro to Artificial Intelligence

Software Engineering

Data Structures and Algorithms

Computer Architecture

Real Time Operating Systems

VOLUNTEERING

2022 Mock interview session for

General Assembly graduates

2022 Code in the Community

Volunteer for L2 Python

ACHIEVEMENTS

2022 Scholarship Recipient AWS

Machine Learning Engineer Scholarship
Program2022 Bronze Medal 15th National
Taekwondo Poomsae Championships

2021 Spot Award Grab

2019 Third place 14th STePS under
CS3243 Artificial Intelligence

EXPERIENCE

NVIDIA | SOFTWARE ENGINEER INTERN

Jun 2024 - Present | Santa Clara

- Intern on the **Autonomous Vehicle** team
- Designed and implementing a self-serve API in **Go** for internal stakeholders that can bypass a manual workflow thereby improving team's productivity by 15%
- Led migration efforts to unify data and streamline architecture, migrating 12,000+ lines of functional tests from SQLite to PostgreSQL for accurate production environment emulation.

NATIONAL UNIVERSITY OF SINGAPORE | RESEARCH ASSISTANT

Jul 2022 - Jul 2023 | Singapore

- Worked with Prof **Roger Zimmerman** and Prof **Ooi Wei Tsang** on multi-camera computer vision in video surveillance in collaboration with **Seagate** and funded by **AI Singapore**
- Increased object detection speed by 7x by changing model from **Faster R-CNN** to **YOLOv3**
- Integrated **YOLOv7** for faster and more accurate tracking
- **Built end-to-end pipeline** of transferring bounding-boxes and person features from multiple nanos (multi-cam) to a central server using **REST**

GRAB | SENIOR SOFTWARE ENGINEER

Aug 2020 - Jul 2022 | Singapore

- Backend software engineer on the **Digibank** team
- **Spot award winner** for exceptional contribution to onboarding and wider Digibank team
- Authored & maintained **microservices** for onboarding orchestration, user verification in **Go**
- Worked on a bootstrap framework to be the backbone of all microservices with **logging**, **stats middleware**, **http routing**, **graceful shutdown** etc.
- Designed and implemented document upload flow for KYC using **Kafka**, **AV scanning**, **AWS S3** and in-house RTC.
- Designed and implemented Customer ID generation for new customers using **RDS**, **Redis**

SHOPEE | DATA ENGINEER

Jun 2020 - Aug 2020 | Singapore

- Worked on the internal version of **Apache Airflow**
- Used **Docker and Python** to improve efficiency of task schedulers by reducing the work done by each scheduler to 50%
- Enabled non-admins to access pools information on the UI

VISENZE | SOFTWARE ENGINEER INTERN

Dec 2019 - Jan 2020 | Singapore

- Intern on the **Data Platform Team**
- Worked with gRPC and protobuf to build REST-like APIs. Incorporated **spring-boot** and made the gRPC useable as an sdk (Python and Java)

AMAZON | SOFTWARE DEVELOPMENT ENGINEER INTERN

May 2019 - Aug 2019 | Berlin, Germany

- Intern on the **AWS Bill Generation Team** (Line Item Data Service)
- Implemented auditor to check correctness of data in LIDS pipeline using **Java**, **Node.js**
- Coded Lambdas to trigger step functions, merge bills, create manifests, query bills using filters. Wrote step functions integrated with **AWS SQS, SNS**

AUTODESK | SOFTWARE DEVELOPMENT INTERN

May 2018 - Oct 2018 | Singapore

- Worked on **Chaos Engineering** for the Wingman team.
- Worked with **AWS** (EC2, S3, IAM, SimpleDB, DynamoDB), **Java**, **Bash Script**
- Implemented multi-threaded scheduling to run multiple scenarios simultaneously.
- **Inner sourced** within Autodesk and used by **6 teams** on Staging and Dev applications.

PROJECTS

IMPART | ADVANCED COMPUTER VISION PROJECT

- Adapted RA-CLIP for noisy datasets, optimizing image-text pairing and performance on tasks like CCTV frame identification and diagram matching. paper:// [here](#)

NETFLIX/SIMIANARMY | OPEN SOURCE CONTRIBUTION

- Fixed an issue where network chaos scenarios not running. view PR:// [here](#)
- Added instructions to create SimpleDB using AWS CLI to **documentation**