

EDUCATION

UNIVERSITY OF CALIFORNIA
SAN DIEGOMS IN COMPUTER SCIENCE
Grad. June 2025NATIONAL UNIVERSITY OF
SINGAPOREBENG IN COMPUTER ENGINEERING
Grad. June 2020 | GPA: 4.25/5.00

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 *
Computer Vision
Natural Language Processing
Intro to Artificial Intelligence
Software Engineering
Data Structures and Algorithms
Computer Architecture
Real Time Operating Systems
Networks

SKILLS

Experienced:
Golang • Python • Java • CFamiliar:
Matlab • MySQL • AWS • OpenCV •
TensorFlow • PyTorch

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
Program
2022 **Bronze Medal** 15th National
Taekwondo Poomsae Championships
2021 **Spot Award** Grab
2019 **Third place** 14th STePS under
CS3243 Artificial Intelligence

EXPERIENCE

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**
- Explored low power object detection on a **Jetson Nano/Orin**
- Increased speed of object detection by 7x with change in model from **Faster R-CNN** to **YOLOv3**
- Implemented custom YOLOv3 to remove dependency on **MMDetection** library
- 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 and maintained **microservices** for onboarding orchestration, verification of users in **Golang**
- 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 Identification number generation for newly onboarded customers using **RDS, Elasticache (Redis)**
- Designed and implemented **tracing middleware** to improve team's service observability.
- Designed and Implemented the **error response structure** common to all services across the bank

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

READ.SLEEP.REPEAT | GOOGLE CODEU PROGRAM

- Worked in a team of 4 to create a web app for book lovers in **Java, Javascript, HTML/CSS**.

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**