

Advay Pal

<https://advaypal.com> | advaypal@hotmail.com

EDUCATION

STANFORD UNIVERSITY

MS IN COMPUTER SCIENCE

Grad. March 2021 | GPA: 4.15/4.0

NATIONAL UNIVERSITY OF SINGAPORE

BComp in Computer Science

Grad. May 2019 | GPA: 4.7/5.0

University Scholars Programme

LINKS

Github:// [advaypal](#)

LinkedIn:// [advay-pal](#)

Twitter:// [advaypal](#)

TEACHING

Operating Systems: Winter '21

Deep Learning: Fall '20, Spring '20,

Winter '20, Fall '19

Data Structures and Algorithms:

Spring '19, Fall '18, Fall '17,

Spring '17

Programming Methodology:

Fall '16

COURSEWORK

Operating Systems

Computer Networks

Compilers

Distributed Systems

Programming Languages

Deep Multi Task and Meta Learning

Natural Language Processing

Computer Vision

AI Planning and Decision Making

Machine Learning

Information Retrieval

Combinatorial and Graph Algorithms

Theory of Computation

SKILLS

Experienced

• Python • C++ • C

Familiar

• Rust • JavaScript • Pytorch

• Tensorflow • Java • OCaml

• Scala • Swift • Ruby

ACTIVITIES

NUS Hackers: **President** (17/18)

Inter College Games: **Soccer**

NUS USP **Peer Mentor**

EXPERIENCE

APPLIED INTUITION | SOFTWARE ENGINEER

April 2021 - Present | San Francisco Bay Area

NURO | SOFTWARE ENGINEERING INTERN

June 2020 - Aug 2020 | San Francisco Bay Area

- Worked simulation team Nuro, a **startup** building autonomous delivery vehicles.
- Built a caching mechanism and timeout feature for a distributed job scheduling framework. Both features are currently used throughout the company.

ZILLIQA | SOFTWARE ENGINEERING INTERN

June 2019 - Aug 2019 | Singapore

- Worked at Zilliqa, a **startup** that applies **sharding** to build **scalable** Blockchains.
- Reduced the **inter-process communication** overheads between the Smart Contract Interpreter and the Blockchain from **linear** to **constant**.

APPLE | SOFTWARE ENGINEERING INTERN

May 2018 - Jul 2018 | San Francisco Bay Area

- Designed, architected, and implemented a **search indexing** tool to efficiently query Siri's **ontology**.
- Was **selected** to present project to the **head** of Siri (Apple **VP**).

TWITTER | SOFTWARE ENGINEERING INTERN

Feb 2018 - Apr 2018 | San Francisco Bay Area

- Worked on **Deep Learning** for the Twitter **home timeline**.
- Used **Deep Neural Networks** to predict user engagement on videos. Performed data analysis, feature engineering, model training, and conducted experiments on production traffic.

TWITTER | SOFTWARE ENGINEERING INTERN

May 2017 - Aug 2017 | San Francisco Bay Area

- Worked on **Twitter Lite**, a **Progressive Web App** with over **6 million** daily users.
- Built Twitter Lite's **live video** experience, and integrated the Chrome **credentials management** API into the app.

RESEARCH

COMPILERS | STANFORD UNIVERSITY

Sep 2020 - Apr 21

- Worked on **TACO**, with Professor Fredrik Kjolstad. Improved support for blocking and workspaces

FEDERATED LEARNING | NATIONAL UNIVERSITY OF SINGAPORE

Aug 2018 - Apr 2019 | Final Year Dissertation

- Worked on devising robust algorithms to deal with **adversarial client nodes** in Federated Learning with Professor Bryan Low.

ACHIEVEMENTS

2020 **Co-authored paper** published at the **IEEE Blockchain Conference 2020**

2019 **Gold Medal** for **outstanding all-round achievement** in graduating CS class

2019 **Silver Medal**, NUS Inter College Games, Soccer

2018 **Excellence in Teaching** award for work as an Undergraduate Teaching Assistant

2017 PwC Prize for the **Most Outstanding Second Year** CS Student

2015 Ranked **61st** out of over **100,000** students in the West Bengal Joint Entrance Exam