

## ABOUT ME

I am a second-year Computer Science Ph.D Student at Stony Brook University. I work in the NetSys Lab with my advisor, [Aruna Balasubramanian](#). My research interests include network performance, mainly peer-to-peer networks and decentralized distributed storage systems.

## EDUCATION

**Ph.D Student in Computer Science**  
Stony Brook University, New York, USA

**Jan 2022 - Present**

GPA: 3.93/4.0

Advisor: Prof. [Aruna Balasubramanian](#)

**B.S. Computer Science**  
Stony Brook University, New York, USA

**Aug 2017 - May 2021**

GPA: 3.80/4.0

## PUBLICATION

### [Is IPFS Ready for Decentralized Video Streaming?](#)

**WWW2023**

ChengHao Ryan Yang, Zhengyu Wu, Santiago Vargas, and Aruna Balasubramanian.

- The video playback experience on IPFS suffers from network instability and static video quality. Traditional ABR streaming performs poorly due to inaccurate network estimation. The proposed IPFS-aware algorithm, called Telescope, can update ABR's estimation on the fly and significantly improve the video playback experience.

### **Sensitive Files on IPFS?**

**Under Submission**

- IPFS is a public decentralized storage system that is content-addressing based, which makes it easy to inadvertently share private files on the platform. This poses a risk as IPFS can store files for extended periods. Our investigation revealed the presence of sensitive files like SSH keys and API keys on IPFS, highlighting the potential risks of accidental file sharing.

## WORK EXPERIENCE

**Graduate Teaching Assistant**  
*Stony Brook University*

**Fall 2021 - Fall 2022**  
*New York*

- Graduate teaching assistant for Introduction to Network Administration. Introduced students with hands-on experience on fundamentals of network management, such as TCP/IP networking protocols, hardware, architecture, media, and software.
- Graduate teaching assistant for Computer Networks. Helped students learn the fundamental structure of the Internet.

**Web/Database Support**  
*Stony Brook University*

**Sep 2020 - Dec 2020**  
*New York*

- Maintained the Computer Science Department's websites at Stony Brook University by using Drupal, a widely used content management system (CMS), and MySQL.

**Undergraduate Teaching Assistant**  
*Stony Brook University*

**Spring 2019, Fall 2019**  
*New York*

- Undergraduate teaching assistant for Computer Science I. Helped students learn the fundamentals of objective programming.
- Undergraduate teaching assistant for Fundamentals of Software Development. Introduced students to systematic design, development and testing of software systems.

### **Founder**

*Hoshiro Entertainment*

**Jun 2018 - Present**  
*New York*

- Founded a company services translating games from Japanese to English and Chinese.
- Successfully maintained a group of over 10 translators and helped partners reach over a million dollar in sales.

## AWARDS & HONORS

**Stony Brook University Scholars (2017 - 2021)**   **IMC Travel Grant (2022)**   **GAANN Fellowship (2023)**  
**Stony Brook University Provost Scholarship (2017 - 2021)**