

# TONY NGO (PhD)

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[PORTFOLIO](#)

[GITHUB](#)

[LINKEDIN](#)

**SKILLS** React, Redux, Javascript, Python, C++, Java, Android Studio, Linux, QtCreator, HTML, CSS, SQL, PostgreSQL, Flask, Express, AWS, Heroku, UI/UX, CAD, Autodesk Inventor, PCD design, 3D printing, Arduino, Raspberry Pi, SBC

## PROJECTS

**DRONEST Full-stack Web App** (React-Redux, Python/Flask, Javascript/Sequelize, Websocket) [live](#) | [github](#)

*Social media platform for drone enthusiasts to share aerial photos and videos; dual-backend servers (SOLO project)*

- Developed frontend with responsive components using React, Redux & JavaScript for a sleek user interface
- Utilized Flask, SQLAlchemy, and PostgreSQL to implement a backend server that stores data/photos/videos and serves REST API routes and AWS file uploading
- Leveraged Websocket and a second ExpressJS server to host instant group messaging to enhance engagement

**INSTAVIBES Full-stack Web App** (React-Redux, JavaScript, Python/Flask) [live](#) | [github](#)

*Clone of Instagram - group project of 4, responsible for 40% of workload*

- Implemented Python/Flask backend and REST API routes, deployed app to Heroku, set up the whole database
- Implemented user following/follower features, stories, user profile page, and direct messaging functionality

**TRIPCAMP Full-stack Web App** (React-Redux, Javascript, Sequelize) [live](#) | [github](#)

*Clone of [www.Hipcamp.com](http://www.Hipcamp.com) (SOLO project)*

- Implemented JavaScript/Sequelize/PostgreSQL backend server and api routes
- React/Redux frontend, Google Maps API, Social media functionality (friends, messaging, networks)

**VUIR Android App** (Java, C++, JavaScript, QtCreator, XML) [live](#) | [github1](#) | [github2](#)

*Production application, hosted on Google PlayStore, for businesses and professionals to control their thermal drones*

- Designed Android Apps using Android Studio that allowed real real-time control and data collection
- Researched and developed hardware and software (C++) for the rover end of the products

## EXPERIENCE

### Chief Engineer

sUAS LLC - MD, US

May 2017 - now

- Develop full-stack software solutions and commercialize them to generate \$1M+ in revenue within 6 months
- Use development tools such as Android Studio IDE, Git Source Code Control to develop solutions in Linux
- Work with clients to understand and step out requirements, use cases, and storyboards

### Engineer

intelligentUAS

Aug 2012 - May 2017

- Designed suites of products that formed the core of the business and set it apart from competition
- Introduced innovative product features that reduce material cost and increase profit margin to 90%
- Established relationships with government agencies and business entities for potential business opportunities

## EDUCATION

**Fullstack Software Engineering** - App Academy | Spring 2021

**PhD - Physics** - SISSA Trieste Italy | 2003 - 2006

**Master - Physics** - ICTP Trieste Italy | 2002 - 2003