

# Nicholas Yang Chee

[www.strangework.net](http://www.strangework.net)

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## Skills

- Programming languages: Golang, Python, Node.js, C++
- Databases: MongoDB, and PostgreSQL
- Backend frameworks: Django, Ruby-on-Rails, and Flask
- Frontend frameworks: React
- Source control: Git
- Systems engineering: Linux system administration (Arch/Debian), AWS
- Blockchain technology: Solidity (Truffle Suite)

## Experience

### Freelance Software Engineer

*(October 2016 - Present)*

Freelanced as a software engineer and project manager, finding my own contracts and coordinating with clients.

Sample projects include:

- Control software for a multiple camera, video streaming system
  - Designed to run on a Raspberry Pi Zero with proprietary video encoding hardware
  - Implemented service discovery, and remote debugging through Linux utilities
  - Software written in Golang and Python
  - Mobile application written in C# and the Xamarin platform
  - Rigorous system testing using Robot Framework
- Firmware for embedded computer for cars
  - Written in C for an AVR microprocessor
  - Performs signal processing to interact with a car's serial bus
- Control software for medical pump
  - Uses a Raspberry Pi's SPI interface with a stepper motor
  - Integrated into a Ruby-on-Rails backend

### Edenworks | Full-stack Developer

*(October 2013 - October 2016)*

Built systems for automating aquaponics rigs, streaming sensor data and providing web frontends

- Network protocol design
  - Implemented serial network for a network of microcontrollers
  - Implemented publish-subscribe architecture for a network of microcontrollers
- Build and test environments
  - Repackaged Arduino hobbyist libraries for industry use
  - Wrote a build system for testing and deploying microcontroller code
  - Assembled system testing environment for heterogeneous systems
- Front-end web design
  - Designed Ruby-on-Rails web application for crop management
  - Built Django web application for viewing sensor data feeds
- Data pipeline design
  - Created Python/sqlite3 application for short-term storage
  - Used AWS S3 storage cloud for persistent storage

## Education

**B.S. in Computer Science** from **New York University**

*(Class of 2015)*

**Jimmy Song's Programming Blockchain Seminar**

*(Tampa, FL on March, 2018)*