# Amartya Vadlamani

Freelance Software Developer

University of Texas, Austin — University College London — MEng Computer Science (graduating Jun 2020)

## Skills

- Python Development
  - Flask, Django
  - data science
- Java
  - Android
  - Desktop
  - Unity Plugin
- Systems Programming
  - C
  - Rust
  - OpenGL, GLSL
- Database Management
  - SQL (Postgres, SQLite3)
  - NoSQL (Redis)
- Linux Command Line (Bash + Zsh)
- Linux System Administration
- Responsive Web Design
  - HTML5
  - CSS3
  - Javascript
  - JQuery

## Contact


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**LinkedIn**
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**Github**
www.github.com/zephyr12

**Personal Site**
amartya.tech


## Employment Authorisation

British National and US Green Card Holder

## Recent Positions

### Contract Software Developer — Capita (05/2018)

Built a data analysis pipeline for Capita, a service based company that deals in improving educational processes, using **Python**, **PostgreSQL**, **Word2Vec**, **NLTK** and **SKLearn** to provide a summary of how parents and students interact with their schools and during trial stages processed 10 years of student fourm data in an hour on commodity hardware.

### Part-Time Data Science Consultant — Beekin (03/2018)

Built a dataflow pipeline that extracts information about housing from various sources and used it to populate a predictive model that computes rent from data applying information gathered from housing descriptions such as ”has a garden” and ”parking spot” to adjust it’s predictions using **NLTK**, **numpy** and **scipy**. The data set in question covered on the order of 100,000 properties and could compute rents and house prices to an error of approximately 15% when compared to actual housing data.

### Summer Security Intern — BT Security (06/2017)

Created an API using Flask that aggregates and normalises IP reputation information from different sources and formats as part of a team of interns. The API can then be used to check if the IP is malicious. e.g. Part of a known botnet or connected to a spam network.

The system was created using **PostgreSQL**, **Flask** and **Nginx** to provide a **RESTful** API that follows all RESTful principles including HATEOAS. It was capable of storing and interactively querying hundreds of millions of rows covering all of the IPv4 and some of the IPv6 address space with several kinds of datapoints on ten year old hardware. I also built a composable parser system to increase the system’s extensibility and long term usability.

### Contract VR Developer — Imperial Medicine (05/2017)

Built a two-part system with both a web tagging engine and a mobile VR viewer with a teammate.

The web tagging engine, made with **Django** allows the user to upload and tag VR videos with HTML, images, PHP forms etc. The engine then exports this data to a custom file format.

The viewer is powered by the **Samsung Gear VR’s** API. Then the VR viewer uses this data to control the appearance of tags and allows the user to interact with them.

## Achievements and Accomplishments

- Bloomberg Code Con — Finalist
- UCL 24 Hour PixelJam — Most Innovative Game
- Facebook Hackathon (London) — “News Balance”
- UCL LearnHack — Best Prototype Solution
- Academic Scholarship — Padworth College
- Circle Tap — Android Game