# **Akash Kumar**



# Work Experience

#### Intigo3D [A software focused 3D printing company]: Full Stack Intern turned Engineer

July 2017-March 2018

- > Programmed arduino controlled 3D printers to accept commands and provide failure statistics to a Raspberry Pi
- > Created an encrypted print pipeline using Python, Flask, and AWS on a raspberry pi and AWS IoT
- > Rebuilt print pipeline yielded a 95% success rate and 70% faster operation compared to pre-existing solutions.
- > Created a web service for designers that allowed them to sell their work and fight piracy using React and Node.

#### NYU, MakerSpace: Technical Lead (Student TA)

2016-2017

- > Built the initial software infrastructure using Node, Flask and Python paired with the machines in the space.
- > Stopped hundreds of dollars in theft through the software tracking and server based monitoring I created
- > Coordinated larger projects with other staff and taught technical skills in weekly workshops to NYU students.

#### Grafiti: Data Visualization Intern

Fall 2017

- > Built interactive visualizations using 6 million lines of data to demonstrate the Grafiti system and methodology.
- > Used Kaggle for initial data, Python (pandas) for filtering, Google Big Data and Cloud for visualization and analysis.

#### Mango Concept: Rapid Development Intern

Summer 2016

- > Rebuilt video system using web technologies and bootstrapping existing solutions. Decreased load times by 300%.
- > Started an advertising platform for one of Mango's brands, increasing product awareness by 75%.

#### NYU, Engineering and Technology Forum: Prototyping Focused Teaching Assistant

2015 - 2016

- > Taught a weekly class for all first-year engineering students about entrepreneurship.
- > Developed and graded weekly projects based on the lean startup methodology.

#### Howl Interactive Incorporated: Co-founder

2013 - 2017

- > Built games and utilities for mobile. Used Swift, Java, and frameworks like React Native as they became available.
- > Incorporated the company and handled the business side as well, even got NYU to pay for the lawyers!

# Recent Projects

Rocket Telemetry: Used python and sensors (accelerometers, GPS, cameras) to track a rocket with triple redundancy.

D-20: Implemented a server side neural network to detect different kinds of music and display it with lights on an art piece.

**Uber Movement:** Made Uber Movement data accessible in a public facing API and displayed it in graphs using node.

Resonance Research: Used Matlab and python to develop technology to mitigate surgical risk using sound and vibration.

### Skills

## Relevant Course Work

Adobe Suite Javascript
Bootstrap MATLAB
Flask Node JS
Go Python
HTML/CSS React

Computer Science

Digital Logic User Experience Design Computer Architecture Wearables

Data Structures Motion Graphics
Data Visualization Typography

## Education

#### New York University | School of Engineering

January 2018

**Design** 

B.S. Integrated Digital Media

A degree that combines computer science with human centered design to create compelling interfaces.