Akash Kumar



Work Experience

Intigo3D [Software focused 3D printing startup]: Full Stack Intern turned Engineer

May 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 analysis startup]: 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 [Full-service digital agency]: 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 [Mobile software]: 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.

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.

Computer Science

Skills

Relevant Course Work

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

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Digital Logic

Computer Architecture

Data Structures

Data Visualization

User Experience Design

Wearables

Motion Graphics

Typography

Education

New York University | School of Engineering

January 2018

Design

B.S. Integrated Digital Media

A degree that combines computer science with design to create compelling digital products.