# SARTHAK KHANNA

1535 N Scottsdale Rd, Apt 2092 • Tempe, AZ 85281 • (630) 605-1805 sarthak.khanna@asu.edu • github.com/khannasarthak • linkedin.com/in/sarthakkhanna

Dedicated graduate student seeking summer internship to explore career options in the software industry. Interested in web technologies, data science and machine learning.

### TECHNICAL SKILLS

Python, Machine Learning- (scikit-learn, pandas), C, JavaScript, HTML, CSS, JQuery, MySQL, Responsive Frameworks (Bootstrap), Flask, Matlab, Git, Linux (Ubuntu)

#### **EDUCATION**

### MS in Computer Engineering (Computer Systems)

Aug 2016 - May 2018(expected)

Arizona State University, Tempe, AZ

### **Bachelor of Technology in Electronics and Communications Engineering**

2016

Major GPA: 8.75/10, Vellore Institute of Technology (VIT), India

#### **RELATED COURSE WORK**

Foundations of Algorithms • Statistical Machine Learning • Software Security • Database Management

### **WORK EXPERIENCE**

### Technical Lead (Developer) at Stealth Gaming, Vellore

(September 2014 - 2016)

- A social gaming start-up, developed website and implemented a web based a user maintenance system.
- Quoted and procured computer infrastructure for setting up gaming systems for the lounge.
- Developed marketing solutions to increase revenue and customer loyalty.
- Maintained the technical infrastructure on a day to day basis.

#### Student Researcher at Creation Labs, VIT Vellore

(2013 - 2015)

- Engineered a home automation solution (subsequently became node0 labs)
- Developed multiplayer PC based games using Unreal Engine 3 and 4.
- Developed various small gadgets and solutions at various hackathons Baby vitals monitoring with self-made sensors using Arduino, Notifier and Connectifier (a hardware hack to make a low cost google glass alternative). Propeller Clock (Persistence of Vision based clock).

## **PROJECTS**

#### **Theatre Management system**

(ASU, 2017)

- A management system built using Flask on python. Setup up a SQL database and performed various tasks like insertion, updates, deletes along with using indexes and triggers in the database.
- Aimed for administrators and users. User can book tickets to a show and the administrator can schedule various shows, set ticket prices change show locations.

## **Airbnb New User Bookings Prediction**

(ASU, 2016)

- Processed raw data, making it usable for further analysis. Used the python Pandas library
- Performed feature engineering and statistical analysis of the data obtaining relevant insights using scikit-learn
- Implemented traditional classifiers and observed the accuracy. Tested blended ensemble of classifiers using multiple data sets. Analysed blended ensembles' performance versus traditional classifiers

# Naïve Bayes, K-NN, K-means implementation

(ASU, 2016)

Prepped raw data and realized the algorithms in python. Used numpy and matplotlib libraries.

### **Stuttered Speech Recognition**

(VIT, 2016)

- Modified an existing algorithm to facilitate speech recognition for people suffering from stuttering
- Performed audio processing and stutter removal in Matlab
- Designed a neural network to learn from training samples to remove stutter from new test inputs in python, this new audio was then passed to the Google speech API to be recognised without the stutter.

# Digit recognition using Matlab

(VIT, 2015)

Created a backward propagation neural network to recognize hand written digits using Matlab

# **Home Automation system**

(VIT, 2014)

- Designed and developed a modular home automation solution at a hackathon (runners up)
- Built the prototype mobile app using MIT app inventor and fabricated the prototype electronic board.

#### **Web Development** (VIT, 2014)

• Created websites for local business around campus using HTML, CSS, IQuery and web frameworks like Bootstrap.