



Archan Dutta

Graduate Student, University of Southern California



Work Experience

Jun 2017 -
Aug 2017

- Position:** Software Engineering Intern
Company: Konviv, Berkeley, California
- Built a full-stack application for smart learning financial assistance that provides better documentation of user's transactions and servicing users to make smarter spending decisions. This MVP was used for funding round of investment
 - Completed 50% of the production level goal
 - **Website URL:** <https://konviv-mvp.herokuapp.com/>
 - **Technologies/ Tools :** Node.js, JavaScript, Firebase, Plaid API



Academic Projects

Jan 2018 -
present

- Role:** Game Designer and Chat-bot Developer
Game Name: Scyther
- A 3D First Person adventure game where the player interacts with a chat-bot via voice to find and complete quests
 - Primarily responsible for defining the game-play, script and designing the chat-bot
 - Implemented camera behavior, map and event triggers
 - **Game Demo URL:** <https://goo.gl/DzdGh4>
 - **Technologies/ Tools:** Unity 3D, C#, Python, IBM Watson (Conversation, Speech to Text, Tone Analyzer)

Sep 2017 -
Dec 2017

- Role:** Project Manager
Project: Arcadia Riptides Swim Club Website
- Developed a website for Arcadia Riptides Swim Club that facilitates registration for participants in swimming events
 - Improved the business workflow by 92.3% based on the benefit analysis. Expected 95% Return on Investment by the year 2020
 - **Technologies/ Tools:** MySQL, JavaScript, PHP, Apache PDFbox

Feb 2017 -
Apr 2017

- Role:** Software Engineer
Project: Unsupervised Emotion Detection of Hindi Songs
- Obtained F-measure of 0.86 on emotion detection of 500 Hindi language songs using Spectral Clustering and NLP techniques
 - Conducted a survey that obtained 81% inter-rater agreement measured using Kappa statistic
 - **Technologies/ Tools:** Python (*NumPy, Beautiful Soup*)

Jan 2017 -
Apr 2017

- Role:** Software Engineer
Project: Data Mining Algorithms using PySpark
- Hidden Markov Model for Parts-of-Speech Tagging
 - Locality Sensitive Hashing on a data-set of 100,000 documents
 - Apriori algorithm for market basket analysis on 1 million baskets
 - **Technologies/ Tools:** Apache Spark, Python



Education

Aug 2016 -
May 2018

University of Southern California
MS, Computer Science **GPA: 3.3**

Aug 2012 -
Jun 2016

Devi Ahilya Vishwavidyalaya (DAVV)
Bachelor of Engineering, Information Technology **GPA: 3.7**



Personal Info

Address

1118 W 37th Dr, Los Angeles, CA

Phone

(408)-601-8822

E-mail

archandu@usc.edu

GitHub

<https://github.com/archandutta/>

LinkedIn

<https://www.linkedin.com/in/archan-dutta/>



Game Engines, Databases and Machine Learning Frameworks

Unity 3D

Blender

MySQL

Google Firebase

MongoDB

Apache Spark

Apache Hadoop



Languages

C#

Python

C++

JavaScript

Java

SQL

Node.js

R

MATLAB



Relevant Courses

Game Consoles and Mobile Devices

Information Retrieval

Natural Language Processing

Database Systems

Analysis of Algorithms

Artificial Intelligence

Software Engineering