

# Arpit Parwal

Address: Los Angeles, California  
Phone: +1 (770)-568-7578, +91 (774)-218-6069  
Email: [aparwal@usc.edu](mailto:aparwal@usc.edu), [arpitparwal@hotmail.com](mailto:arpitparwal@hotmail.com)

Website: <http://appielife.in>  
LinkedIn: <http://bit.ly/appielinkedin>  
GitHub: <https://github.com/appielife>

## EDUCATION

---

### Master of Science in Computer Science

June 2019 — May 2021

Viterbi School of Engineering, University of Southern California

GPA: 3.4/4.0

Relevant Coursework: (Algorithms, Artificial Intelligence, Natural Language Processing, Machine Learning, Augmented & Virtual Reality)

### Bachelor of Technology in Computer Science

July 2013 — June 2017

SRM Institute of Science and Technology

GPA: 9.03/10

Relevant Coursework: (Data Structures, Web Technologies, User Experience, Software Testing, OOPS, Microprocessor, Engineering Math)

## WORK EXPERIENCE

---

### Software Developer Engineer Intern, Amazon.com Inc., Seattle, USA

May 2020 — Aug 2020

- Created a monitoring tool for scheduled content flow inside Amazon enterprise software stack.
- Integrated the tool in existing system that averages 72K hits/sec and secured low latency and high availability.
- Engineered entire architecture from metrics collection to retrieval using Native AWS tool.
- Deployed the entire infrastructure in corporate environment to be used internally by teams across Amazon.

### Full Stack Developer, Akeo Software Solutions, India

April 2018 — May 2019

- Produced 3+ Proof of Concepts working as a full stack developer (MEAN Stack)
- Managed and organized several ICOs developed with backend in Blockchain, Ethereum & Solidity.
- Devised a unique algorithm for generating cryptographic wallets for securing user information.
- Collaborated to secure seed funding of \$100K for an automotive project by formulating technical & analytical proposal.
- Conducted orientation and organized recruitment event for 2K+ participants as part of Talent Acquisition team.
- Lead a team of three while working on orientation and training module under 'Freshers mentorship program'

### Mobile Application Developer, Akeo Software Solutions, India

June 2017 — March 2018

- Developed 5+ android and iOS mobile applications and published on respective stores.
- Implemented maps, push notifications, auto OTP reader, advance searches in real time
- Formulated device offline mode enabling a user to use app without connecting to internet.
- Supervised team of five, for making search algorithm accurate and robust

## PUBLICATION

---

Paper: **Deduplication in Cloud Storage using Hashing Technique for Encrypted Data**

March 2018

Journal: ARPN Journal of Engineering and Applied Sciences

Link ( [http://www.arpnjournals.org/jeas/research\\_papers/rp\\_2018/jeas\\_0318\\_6881.pdf](http://www.arpnjournals.org/jeas/research_papers/rp_2018/jeas_0318_6881.pdf) )

## PROJECTS

---

**The Exam Artist** Link( <https://theexamartist.art.blog/> )

January 2020-Present

- Synergized with peers to develop a **Virtual Reality game in Unity**, exhibited at USC Games Expo 2020
- Oversaw end to end development and implementation of business logic using **agile methodologies**.

**Real time flight review using Mobile App**

October 2019 - Present

- Trusted to develop end to end an entire **production grade mobile application** to review flights in real-time.
- Pioneered using **RESTful API architecture** style using NODE, React, MySQL along with variety of tech stack.

**Web link Scrapper and filter** Link(<http://52.37.213.157/>)

April 2020

- Formulated a **python web scrapper and filter system** to improve data quality to be used for analysis.
- Boosted the usability by deploying the system using **Django web framework** on an Apache server.

**Question Generation from text** Link([https://github.com/appielife/CSCI544\\_NLP\\_FinalProject](https://github.com/appielife/CSCI544_NLP_FinalProject))

December 2019

- Explored **Seq2seq or Encoder decoder model** to generate competitive question stack from a given paragraph.
- Quantified our model to predict smarter and tougher questions than contemporary **NLP models**.

**AI Agent for playing Halma (Chinese Checkers)** Link( <https://github.com/appielife/AI-Agent---Halma> )

November 2019

- Probed the use of **Min Max algorithm to develop an AI agent** to play a form of Chinese checkers called Halma.

- Proved the efficiency and adaptability of the agent by playing against 750 peer agents and ranked in top 50.

**Inventory Management Solution** *Link*( [https://drive.google.com/open?id=1t33Jcs\\_uEvX\\_S0Bri119yrhrHqvK-Vrx](https://drive.google.com/open?id=1t33Jcs_uEvX_S0Bri119yrhrHqvK-Vrx)) *May 2019*

- Optimized a primitive methodology of inventory management by developing MEAN stack-based web solution
- Generated algorithm in order to reconcile 5K of existing entries in digital format for data analytics.

**Loan Management Solution** *Link*(<http://grpfinance.in/grpfin/>) *March 2017*

- Orchestrated software architecture from scratch for a PHP based web application for loan management
- Programmed CMS, loan entry, reminder, receipt generation, collection status, account reports modules

**Informational website(s)** *Link*(<http://balajihospitaljaipur.com/>, <http://gopalamjewels.in/>) *March 2016*

- Spearheaded entire process from development to deployment of informational websites as a freelance project.

---

## CO-CURRICULAR ACTIVITIES

**Disaster Recovery Specialist, American Red Cross LA Region** *May 2020 — Present*

- Responded and steadfast on-call to home disasters (e.g. fires, floods, etc.) to provide relief and recovery services.
- Providing humanitarian and financial support to emergency cases and disaster affected people.

**Student Worker, USC Libraries** *September 2019 — Present*

- Facilitated in preparation of numerous student outreach and informative libraries event.
- Perform general office duties and automated several process using Office tools to eradicate human error.
- Determined a systematic approach to event planning to help curb wastage of consumables and increase productivity.

**Student Ambassador, USC Viterbi** *February 2020 — Present*

- Directed incoming and prospective students to informative sessions and live Q&As via chat.
- Composed several contents in form of blogs and handouts to address general queries and guidelines.

**Course Mentor, USC Ming Hsieh Institute** *August 2019 — December 2019*

- Worked under Professor Shahin Nazarian (Ph.D.) for the course EE 577B: VLSI System Design.
- Responsible for the development of course-related materials and student portal.
- Built an interactive course portal along with documentation using WordPress.

---

## TECHNICAL SKILLS

- *Front End*: Angular, React, JavaScript, HTML & CSS, XML, WordPress, Magento
- *Back End*: Node, Express, PHP, Django, .Net, C, C++, Java, Python, AWS Lambda, MATLAB
- *Database*: SQL Server, MySQL, MongoDB, CouchDB, DynamoDB, AWS Athena, AWS Glue
- *Mobile*: React Native, Ionic, Cordova, Android Studio, XCode, Firebase,
- *Blockchain*: Solidity, Hyperledger Fabric, Composer, Metamask, IBM World Wire,
- *DevOps*: Jenkins, Docker, Swagger, Apache, phpMyAdmin, XAMPP, PuTTY, Amazon Web Services, AWS CloudFormation
- *Machine Learning*: PyTorch, Kaggle Datasets, TensorFlow, scikit-learn, NLTK, TensorBoard, Keras
- *Data Visualization Tools*: Google Data Studio, Firebase Analytics, SQLyog, MS Excel
- *Game, Graphics & Animations*: Unity, Adobe Illustrator, Photoshop CS5, Lightroom, Premiere Pro
- *Other*: MS Office, G Suite, Tally, Google Cloud Platform, Amazon Web Services, Postman, Data Studio