

ARUP ARCALGUD

Software Developer

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PROFILE

A full-stack developer and user experience researcher experienced in web and mobile frameworks, seeking opportunities to learn and build on platforms while providing great user experiences.

EDUCATION

Georgia Institute of Technology – M.S. Computer Science

Aug 2018-May 2020

- Specialization in Interactive Intelligence, 3.77 GPA

University of Wisconsin – Madison – B.S. Computer Science

Aug 2013-Aug 2017

WORK EXPERIENCE

Graduate AI Research Student

May 2019-Present

Georgia Institute of Technology – Atlanta, GA

Working in a project group under Professor Ashok Goel on designing a frame-based AI agent with the focus on providing suggestions and generating questions for first time startup founders regarding their business model.

- Planned roadmap, and designed a knowledge-based agent focused on giving feedback to startups regarding their business models with a cross-functional team
- Performed literature reviews and competitive market analysis to assess user pains and needs for similar platforms and services
- Designed a new UI in Adobe XD, developed a working prototype in HTML5, CSS, React, and Python
- Conducted 3 rounds of iterative usability studies and A/B concept testing with 10 users
- Used Python natural language processing (NLP) libraries to parse user inputs and compare them to the knowledgebase we created using the ConceptNet API, allowing our AI agent to form accurate questions and suggestions regarding the input sentences

Full-stack Developer

Feb-Aug 2018

Allianz Life – Minneapolis, MN

Helped plan for transitions to newer web frameworks with focus on scalability and support with enterprise architecture teams.

- Facilitated participatory design interviews with 3 different end-user groups at Allianz Life, gathered requirements for internal web application
- Planned, designed, and delivered a prototype full-stack web application within 2 months, with MongoDB, Node.js server, and JavaScript frontend (MongoDB, Node.js, Embedded JavaScript, Express.js) to showcase scalable web technologies
- Web app allowed 140,000+ IT and non-IT employees to familiarize themselves with the 100+ technologies and tools at Allianz Life
- Used continuous integration via Docker containers and Jenkins to reduce deployment time

Front-end web development as part of a cross-functional Agile feature team, focused on the Allianz Life customer portal.

- Introduced JavaScript unit testing tools, methods, and standards for front end development (Mocha, Chai, jQuery mocks)
- Implemented platform design changes for the Allianz Life Customer Portal based on user feedback data, including high contrast color research
- Tracked and resolved code issues using Atlassian's JIRA, fixing well over 50 existing issues in website source code

UX Design Intern

Nov 2017-Feb 2018

Stage1818 – San Francisco, CA

Worked with an early stage startup that provides a rapidly growing online platform for upcoming artistic talents to find auditions with entertainment directors and producers.

- Organized feedback from platform users via affinity diagrams for features with an international team
- Visualized and conveyed 5 feature design changes via Bootstrap mockups, provided a more user-friendly visually appealing interface
- Implementing marketing and product feature tactics for user retention and adoption; conveyed tactics such as viral social media marketing and branding

Software Development Intern

Jun-Aug 2016

Zephyr – Newark, CA

Used Agile methodology to develop and test Linux and Microsoft server-side scripts for facilitating customer database backup and restore.

Collaborated across departments (Product Development, QA, Client Services) to gather customer requirements and deliver effective solutions

- Debugged and solved 5-10 issues a week while testing RESTful API calls to test robustness and functionality of Zephyr Cloud 4.8 web app
- Provided 2 new features for the Zephyr Cloud 4.8 product release (Aug 2016) – database backup and database restore on Windows, Linux servers using JDBC API
- Delivered customer-centered features to help facilitate ease of use – extended database backup compatibility to numerous database vendors (MySQL, PostgreSQL, Oracle, NoSQL)

PROJECTS

Pomodoro Project Tracker – The Project Planning App

Jan 2019-Present

React, Redux, Django

Over the span of 4 months, worked remote to design and develop a React frontend as part of a cross-functional team project for building an online Pomodoro project tracker. Worked with backend teams to integrate React frontend with Django backend according to the RESTful API specifications. Communicated with DevOps team to have a CI/CD pipeline in place for live deployments to AWS servers.

- Designed React frontend with MaterialUI, Redux state management
- Integrated React frontend to Django backend via Axios
- Pushed code improvements and bug fixes iteratively to codebase with live CI/CD pipeline

Pond – The App for Meeting New People

Jan 2019-Present

Ionic, Node.js, MongoDB

In the process of designing and developing a social app that allows users to sign on and meet new people every day in their free time. The app follows the design trend of friend-making apps such as Bumble BFF, but users are randomly assigned matches based on daily availability. No swiping, no time wasted on the app – our focus is to get people to meet and make connections in person! Future features include a chat feature, location selection, and curated matching.

- Validated designs with user research and data, 3 rounds of iterative user interviews
- Transformed conceptual ideas into actionable flows, mock-ups, and prototypes, designed the 3 core features of the app

CAPABILITIES SUMMARY

Web and Mobile:

- HTML5, CSS, Bootstrap, Apache Cordova, Google Firebase, Slack, Atlassian JIRA, GitHub Tools, Docker
NodeJS, React, Embedded JS, Python Flask, MongoDB, Mocha + Chai Unit Testing Frameworks, Java 8, Android OS, iOS

UX Design:

- Iterative user research, prototyping, mockups, development, design validation with user data
- Adobe XD, InVision, Sketch, XCode

Data Science:

- Python, TensorFlow, Keras Datasets, Pandas, Numpy, Matplotlib, SciKit-Learn
Decision Trees, Neural Networks, K-Nearest Neighbors, Clustering, Feature Selection, Dimensionality Reduction