Aditya Nirgun

adityanirgun.github.io |Contact #: ▮▮▮▮▮▮▮▮▮▮ | email: aditya@nirgun.com

WORK EXPERIENCE

Accenture - Application Development Senior Analyst — August 2020 - Present

- Built REST APIs for new BenefitsCAL portal in an Agile project structure. Responsible for developing functionalities that ranged from saving data entry from online page into database, sending data to third party service to generate PDFs populated with data, updating user account info, and locating offices closest to user based on lat-long coord
- Worked on Text Messaging batch job solution for CalSAWS project that used Amazon Pinpoint, AWS S3, JDBC, SQL

HQ Software Consulting - Web Developer and IT Specialist — September 2019 - June 2020

- Built a single page web application in Node.js for searching, sorting, and analyzing asset tracking data
- Created and deployed a Web API to fetch SQL database content populated from Drupal form submissions and print it on correctly formatted sticker labels using a label printer's proprietary SDKs, ASP.NET , MVC, and IIS
- Built the Recover.hcd.ca.gov website for hosting public disaster recovery information and a mailing list service using Drupal CMS

Bailey Plant Simulation Lab at UC Davis - Research Assistant — March 2018 - July 2019

- Developing user interface for crop simulation and data projection application *Cronus* in C++ with Qt Framework
- Modifying LiDAR point cloud scan data of crop fields into 3D meshes for immersive observation with the HTC Vive Head Mounted Display in Unreal Engine's VR game environment

UC Davis IET - Student Staff — October 2015 – December 2015

- Scripted, recorded, and published customer support tutorial videos intended for the UC Davis internet user base

Accenture – Contractor — July 2014 – Sept. 2014

- Successfully completed migration of the project documentation to a new Mediawiki site.

SKILLS

Programming skills
Java
Python
Node.js, React
SQL
JS, HTML, CSS
MATLAB
UNIX command line

Software Skills:
JDBC
Virtualization
Excel Data Modeling
Multiple IDEs
Git bash
UI Design
Batch Jobs

PROJECT EXPERIENCE

Selective Breeding with Brassica Rapa — Jan. 2018 – Mar. 2018

- A breeding project carried out for increasing leaf trichome number in a population of Brassica Rapa
- Significant increase of 1.4 standard deviations of the mean reported in the progeny generation

Foundations of Biosystems Engineering Algal Bioreactor Project — Jan. 2017 – Mar. 2017

- Original design and construction conceived for the purpose of cultivating algae and potentially extracting ethanol-based fuels
- Project limitations included cardon footprint , energy efficiency, and portability

MATLAB Audio Sampler — Mar. 2016

- Music editing and creation application written in the MATLAB environment
- Functionality included playback, interactive waveform visualization,analog synthesizers, BPM and tempo adjustment, and audio filters such as low-pass and vocal removal

EDUCATION

University of California, Davis — Jun. 2019
Bachelor of Science, Plant Science
Emphasis: Genetics and Plant Breeding

CERTIFICATION

Amazon Web Services Cloud Practitioner Sept. 2019

Lab Skills:

Biology and chemistry lab procedure	Agrobacterium culture
Isolation and analysis of proteins	Leaf-disk inoculation
Gel electrophoresis of RT-PCR products	Gene database investigation
Protein and RNA blot analysis	Plant growth tracking
Quantitative GUS analysis	Vertical hydroponics assembly
Micropropagation	Fertigation system
PCR and DNA isolation of transformed tissue	