Akshaya Anand | akshaya21042@gmail.com | 443-996-6849

EDUCATION

Bachelor of Science | University of Maryland (UMD) **[September 2015 - December 2019]**

- **Computer Science**: Deep Learning for Healthcare Image Analysis, Applied Machine Learning, Bioinformatic Algorithms, Databases, and Tools; Object-Oriented Programming; Organization of Programming Languages; Introduction to PHP, MySQL, and Apache; Data Structures; Design and Analysis of Algorithms; Computer Vision; Programming Handheld Systems; Ethical Hacking
    - **Languages**: Python, Javascript, R, HTML, CSS, SQL, Java, Swift, Matlab, VBA
    - **Frameworks and Libraries**: Numpy, Pandas, Pytorch, scikit-learn, React

RESEARCH AND WORK EXPERIENCE

Postbaccalaureate Research Fellowship | NIH **[September 2021 - Present]**

- Designed deep learning model pipeline for automated classification of Computed Tomography (CT) medical images

Postbaccalaureate Research Fellowship | NIH **[September 2020 – August 2021]**

- Analyzed various machine learning algorithms for classification of Interstitial Lung Disease in Systemic Sclerosis patients using genomic sequencing data and T-Cell Receptor data
- Designed data pipelines for rare variant genomic analysis (WES and WGS data); steps included preprocessing data, linear regression analysis, and presentation

Computer Science Teaching Assistant (TA) | UMD | FAES-NIH **[August 2018 - May 2019 , Jan 2021]**

- TA for Introductory Coding Skills (2021) at FAES-NIH, Bioinformatic Algorithms (Spring 2019) and Introductory Web Development (Fall 2018) at University of Maryland
- Guided students on projects and course content, proctored and graded exams/quizzes, assisted students with technical troubleshooting, designed class activities, collected attendance data, held weekly office hours

Intern | AgriMetis LLC, Lutherville MD **[May 2018 - September 2019]**

- Project Lead for ChemCart database set up of AgriMetis pipeline compounds Tier I/II results
- Scripted Python program to parse the data files and created SOP's detailing database usage and scripting process
- Worked directly with R&D Leadership and presented final project to company executives and team members
- Designed dynamic Excel sheet to automate box and whisker plot generation, thus enhancing data presentation efficiency for company scientists

POSTER PRESENTATIONS

***Novel analytical tools in an admixed population identify systemic sclerosis susceptibility loci*.** Akshaya Anand, Janet Wang, Daniel Shriner, GRASP Collaborators, Daniel Kastner, Pravitt Gourh.

NIAMS IRP Scientific Retreat, National Institutes of Health **[June 2021]**

Virtual Postbac Poster Day, National Institutes of Health **[April 2021]**

LEADERSHIP AND SERVICE

Dance Teacher | Jayamangala School of Music and Dance, MD **[September 2019 - Present]**

Machine Learning Engineer and Full Stack Web Developer | Virtual Stethoscope, PA **[March 2022 - Present]**

AWARDS, RECOGNITION, AND PROJECTS

Intramural Research Training Award | National Institutes of Health **[September 2020 – Present]**

EmergeNeed - *Awarded Best use of InterSystems FHIR services* | Stanford Treehacks **[February 2022]**

*** Awarded Best Hack to Kill COVID***

SheConnect – *Awarded Best Use of an AI Model* | UMD Technica **[November 2021]**

Augmented Reality Tools to Learn a Foreign Language | UMD Technica (Tech + Research) **[November 2019]**

CareFall FitBit App| Johns Hopkins Medhacks **[September 2018]**

CloseCall – *Awarded Best Hack for Aiding Natural Disaster Recovery Efforts* | UMD Bitcamp **[April 2018]**