

# Akhil Sai Peddireddy

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## EDUCATION

### University of Virginia, Charlottesville, USA

Aug 2019 - May 2021

Master of Science (M.S), Computer Science. **GPA: 3.97/4**

Thesis - "Using data, models and dashboards for real-time response to the COVID-19 crisis"

### Jawaharlal Nehru Technological University, India

Aug 2014 - Apr 2018

Bachelor of Technology (B.Tech), Computer Science & Engineering. **GPA: 8.18/10**

## WORK EXPERIENCE

### Biocomplexity Institute, University of Virginia | Research Assistant

Aug 2019 - Present

- **[Pub]** From 5Vs to 6Cs: Operationalizing Epidemic Data Management with COVID-19 Surveillance (First Author) - Published at **IEEE Big Data 2020**, a top-tier research conference in Big Data & Data Mining [\[Link\]](#)
- Forecasting the spread of COVID-19 with BMA ensemble of Kalman filter & AR models - **Featured at CDC** [\[Link\]](#)
- Led the development efforts on COVID-19 Surveillance Dashboard - One of **Top COVID-19 Dashboards worldwide** with over 4 million pageviews and 1.2 million unique users [\[Link\]](#)
- **[Pub]** Evaluating the impact of international airline suspensions on the early global spread of COVID-19 [\[Link\]](#)
- Data Collection, Analysis & Modeling for Multimodal Spatio-Temporal Influenza Surveillance

### IIT Madras | Research Intern

May 2017 - Jul 2017

Understanding and Working with MOOL Kernel - at Distributed and Object Systems Lab

## SKILLS SUMMARY

Computational Epidemiology  
Data Scraping & Automation  
ML & Deep Learning  
Blockchain & Cryptography

Computer Vision & NLP  
Information Retrieval  
Statistical Modeling  
Big Data & DBMS

Research Writing  
Web Development  
UX Research  
Security Analysis

**Programming Languages:** Python (preferred), Java, R, C, C++, JavaScript, HTML, CSS, SQL, C# .NET

**Tools:** pandas, jupyter, git, LaTeX, Rstudio, sklearn, pytorch, tensorflow, numpy, opencv, nltk, ggplot2, GIS, Linux, AWS etc.

## PROJECTS

- **[Pub]** Personalized Review Ranking for Improving Shopper's Decision Making: A Term Frequency Approach [\[Link\]](#)
- Evolution 2.0 - Generating, Fine-tuning and Evaluating Artificial Human Faces from StyleGANs [\[Link\]](#)
- Web Scraping hundreds of websites with Python using Requests, BeautifulSoup & Chrome Network Analysis
- Privacy-Preserving Machine Learning with Differential Privacy & Trusted Execution Environments [\[Link\]](#)
- Hashiwokakero - An interactive puzzle solver app on Telegram using Knuth's Algorithm X [\[Link\]](#)
- Cryptocurrency Arbitrage Tracker with Telegram bot & Excel VBA using API endpoints and WebSockets
- TokenSIP - A tool for Systematic Investment in Cryptocurrencies & Strategy based Automated Trading
- Reel the Real - Navigable Synchronous Virtual Gatherings on the Web [\[Link\]](#)
- Vehicle Loan Default Prediction using ML, EDA & other Data Mining techniques on an Imbalanced Dataset [\[Link\]](#)
- Web Development: as a Freelancer (PHP-MySQL, WordPress, Magento) | for Tech Symposium & ICCIDE Conference

## ACCOMPLISHMENTS

- Received "Department of Computer Science Academic Excellence Fellowship" at University of Virginia
- Microsoft Technology Associate (MTA) certifications in Software Fundamentals & Database Fundamentals
- Elite Certificate in Database Systems, a semester long course by IIT Madras
- Runner-up in Windows App Development Hackathon conducted in 2016

## ACTIVITIES

- Served as a TA for the class "ENGR 2595 - Pandemics Beyond the Headlines: COVID-19" at UVA with 600 students
- Workshops Attended: Ethical Hacking, MEAN Stack, App Development (Android, Windows, Unity Game Engine)
- **Hobbies:** Freelancing, Engaging with Crypto Community, Bug Hunting, Blogging & SEO, Digital & Affiliate Marketing, Organizing Campus Events, Investigative Journalism, Politics, Playing Chess & Cricket, Traveling