650-823-9367 auppal@umass.edu github.com/aj8uppal indiaairquality.com theajuppal.com

## Experience

RESEARCH ASSISTANT, UNIVERSITY OF MASSACHUSETTS AMHERST, AMHERST, MA – OCTOBER 2019 - PRESENT

Simulating fluid dynamics for the cooling of CO2 for use in particle physics detectors, with python (numpy, scipy, pandas, matplotlib), and Matlab (data analysis/visualization).

SOFTWARE ENGINEERING INTERN, GOT IT, INC., BURLINGAME, CA - SUMMER 2019

Spearheaded the engineering for the ExcelChat chrome extension, built javascript modules (<u>AutoTyper</u>, <u>testimonial carousel</u>), built "bot" to maintain problem volume, helped serve QueryChat AI demo, schema scraping from GitHub/SQLFiddle.

SOFTWARE ENGINEERING INTERN, YOUWEB INC, BURLINGAME, CA – SUMMER 2018

Led the marketing campaign for a YouWeb Inc (Discord, Got-it) project, and built the campaign website and web application (javascript, node.js, photoshop, illustrator)

AIR QUALITY SCIENTIST & DATA ANALYSIS INTERN, BAAQMD, SAN FRANCISCO, CA – SUMMER 2017
Built, tested, and calibrated low cost air pollution monitors (C) at the Bay Area Air Quality
Management District. Built the cloud networking interface to view the data globally
(python, javascript, node.js).

SOFTWARE DEVELOPMENT INTERN, VELOCLOUD NETWORKS (ACQUIRED BY VMWARE), MOUNTAIN VIEW, CA – SUMMER 2015, 2016

Carried out performance analysis of the network appliance using Ixia, built a web front end to animate the deployment of geographically distributed sites. (javascript)

## Education

University of Massachusetts, Amherst – Dual Major: Computer Science B.S., Astrophysics B.S. – 2022

## Skills

Languages: python, javascript, java, C, SQL, HTML/CSS

Frameworks: React.js, node.js, <u>socket.io</u>, jquery, pytorch, Flask, Redux.js, Three.js, OpenCV

## References

Phil Martien (BAAQMD), David Holstius (BAAQMD), Ajit Mayya (VeloCloud Networks, Inc.)
Peter Relan (YouWeb, Inc.). Contact information available upon request.