Tanay Gandhi

tgandhi1@asu.edu | tanaygandhi.com | linkedin.com/in/tanay-gandhi/ | github.com/tanayg2 | (925)548-9270

SKILLS

Languages: C#, Python, Java, C/C++, HTML/CSS, JavaScript, SQL, SAS, Unix Shell
Frameworks: Git, .Net Core, Xamarin, React, CNNs, REST, SOAP, OAuth, Electron JS, PostgreSQL, SQLite
Coursework: Data Structures, Operating Systems, Database Management, Distributed Systems, Intro to Machine Learning

EDUCATION

Arizona State University | Computer Science B.S. | August 2018 – June 2022

- Minor: Statistics
- GPA: 3.77

WORK EXPERIENCE

Software Engineer Intern | Garmin International | Scottsdale, AZ | May 2021 – Current

- Improved tablet-based in-flight calculation application by implementing service to sync offline calculations with company database
- Utilized Xamarin (.NET), SQLite, and REST API in development

Aviation Chart Capstone Project | Honeywell Aerospace | Tempe, AZ | January 2021 – Current

- Trained 2 machine learning models (yolo-cnn & fr-cnn) to label 24 specific regions of complicated FAA aviation approach charts
- Designed & built React.JS web app to receive inputted chart image, send to labelling server, and display chart with clickable regions

Software Engineer Intern | Garmin International | Scottsdale, AZ | June 2020 – January 2021

- Authored .Net application to parse data from air traffic controller broadcasts from 250 airports into SQL database for internal use in commercial airline landing calculations
- Demonstrated to 25-person app development team potential improvements in department-wide server processing and monitoring using RabbitMQ technology with proof of concept product
- Launched application to integrate feed of weather data into existing flight efficiency application, expanding weather calculation services to cover 80% more of target country's airspace, helping retain multiple large airline customers

Undergraduate Teaching Assistant | Fulton Schools of Engineering | Tempe, AZ | January 2020 – May 2020

- Aided CSE 120 class sections for Digital Design Fundamentals and Computer Organization & Architecture
- Created online course content for class of 200 to test students on key concepts such as flip flops and finite state diagrams
- Helped troubleshoot software glitches with Intel Quartus circuit design software Communicated with students via discussion board to clarify course topics from Boolean Algebra to Microprocessor functionality

PROJECTS

ASA Datafest 2021 | Best Use of Machine Learning award

- Performed using pandas, sklearn, numpy, and matplotlib python libraries on Jupyter notebook
- Parsed unstructured free text portion of U.S. survey on drug misuse containing 100,000+ responses
- Generated Bag-of-Words model, sentiment analysis, topic models, and logistic regressions on data divided into 6 age groups
- Analyzed trends of prescription drug misuse by age to determine how age affects sentiment, causes, and sources of Rx drug misuse

Inbox Management Utility | .Net desktop application for periodic inbox cleaning

- Built using .Net, SQLite, Electron JS framework, HTML 5/CSS, Gmail API
- Designed application to allow user to take action on all emails sent from specified addresses in bulk with minimal keystrokes
- Identified 90% of causes of inbox bloat and take action to reduce it

Photographer's Sunset | React.JS web app to calculate geographically accurate sunset times

- Built in React using Google Maps Elevation API & Places API
- Implemented application to calculate exact time when sun sets behind large mountains on horizon
- Utilized Elevation API to pull elevation data to calculate time when sun passes behind largest object relative to user coordinates

ASA Datafest 2019 | Statistics Hackathon

- Analyzed large volumes of unstructured training and health data from the Canadian Women's national rugby team to generate insights about the effect of fatigue on gameplay, within 48 hours
- Performed statistical analysis, hypothesis tests on data using R, plotted conclusions using R's ggplot
- Developed predictive regression model to determine effective training routine based on health factors

COVID Lockdown Internet Speed Analysis | Internet speed statistical analysis

- Collected home internet speeds immediately after COVID lockdown in March 2020 using shell script and performed hypothesis tests to determine whether AT&T U-verse was under-delivering on its speed claims

Portfolio Website | HTML, CSS (Bootstrap), & JavaScript personal website

- Displayed career achievements, positions, and photography portfolio on static website