KASHMIRA SAWANT

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EDUCATION

University of Michigan — Ann Arbor, MI
Master of Health Informatics — GPA: 3.93/4.0 — *2021 - Present*

Nair Hospital Dental College — Maharashtra, India
Bachelor's in Dental Surgery — GPA: 4.0/4.0 — *2014 - 2019*

SKILLS

Programming: Python, SQL, R, Machine Learning, Natural Language Processing, HTML, CSS3, JavaScript
Analytical Tools: Tableau, SAS, Microsoft Excel, Power BI
Database: MySQL, Oracle, SQLite, PostgreSQL
Electronic Medical Records (EMR): Epic (MyChart), Cerner, OncoEMR
Medical Terminology: ICD -9, ICD-10, HCPCS CPT, LOINC, SNOMED, RxNorm

SKILLS

Certification: Epic Clarity Certification - In Progress.

EXPERIENCE

Michigan Health Information Network Shared Services (MiHIN) — Lansing, MI
Synthetic data Intern (Reseach and Development Department) — *Dec 2022 - Present*
- Creation of test patient personas and records for FHIR Pilot Interoperability Testbeds (PITs), DaVinci, Interopathons, and internal requests as needed.
- Loading, updating and deleting of JSON resources to FHIR Pilot Interoperability Testbeds (PITs). Interpretation of XML documents to create JSON records for test data. Creation of FHIR PITs resources for testing.
- Creation of synthetic HL7 data standards messages to emulate realistic patient records for testing.
- Maintenance of a User Guide that can be used as a quick guide for onboarding clients of the Interoperability Land application.

Michigan Health Information Network Shared Services (MiHIN) — Lansing, MI
Enterprise Operations Intern (Health Information Technology) — *Sept 2022 - Dec 2022*
- Delivered data warehouse and analytic solutions by writing ETL packages, developing visualizations, performing data and statistical analyses to deliver information to the health system.
- Evaluated data quality using SQL and interpreted results and visualized data using Tableau dashboard.
- Assist with the development of pipelines to synthesize raw data into actionable information.

Michigan Medicine — Ann Arbor, MI
Research Intern (Data Analytics) — *Jan 2022- Dec 2022*
- Developed sociotechnical maturity model frameworks for Precision Oncology for quality improvement of healthcare delivery by aggregating patient data, transforming it into knowledge, and implementation of knowledge in practice.
- Performed statistical analysis on large dataset using Python and developed codebook for analysis of qualitative data and identification of themes from interviews.
- Analysed 34 qualitative interviews transcripts conducted with implementation specialist, medical oncologist, pathologist, and tumor board director at Michigan Medicine, Northwestern Hospital, and UCSF School of Medicine.

University of Michigan — Ann Arbor, MI
Graduate Clinical Informatics Intern (Machine Learning) — *May 2022 - Aug 2022*
- Conducted exploratory data analysis on tweets of African American influencers and consolidated a list of keywords and hashtags that can be used to further extract tweets.
- Text identification was done for African American Vernacular English on tweets dataset related to COVID-19.
- Logistic Regression Model and Support Vector Model were used for binary classification of tweets.
- This project was done in collaboration with Henry Ford Health System to address the critical need to develop culturally relevant, justice-centered, and actionable approaches to health crises impacting the US African American community and other vulnerable groups.

Inventurus Knowledge Solution   Maharashtra, India
Medical Data Analyst and Medical Scribe   *Sep 2019 - June 2021*

- Assisted in development of data formatting and cleaning criteria from Electronic Health Records like Epic and Cerner.
- Scribed medical notes for 50 physicians from General Medicine, Geriatric and Gynecology Departments and followed specifications of the physicians for note capture by creating EHR templates.
- Formulated procedures for data extraction, transformation and integration of healthcare data for more than 8 projects.
- Worked with 15 providers at Advocate Health Care, Chicago and Lehigh Valley Physician group, Pennsylvania. Experience working with medical charts and knowledge of HIPPA compliance.

PROJECTS

Artificial Intelligence-enhanced Clinical Decision Support (AI-CDS) for precision health
Research Analyst

- Conducted literature review on the use of digital health for the management of palliative care in geriatric patients.
- Analysed qualitative data concerning the relationship between digital health service and improvement of healthcare delivery.
- Facilitated and coordinated with teammates on the project deadlines and deliverables. Worked on manuscript writing for the project.

African American and Latinx perspectives on COVID-19 in regions of Michigan (MI-CEALS)
Data Analyst

- Conducted qualtative analysis to determine the effects of Social Determinants of Health (SDOH) in effects of COVID-19 among the members of African American and Latinx community.
- Analysed interview data by development of Codebook and highlighting themes most significant in the interviews.
- Formulated procedures for data extraction, transformation and integration of healthcare data from qualitative interviews.

Sentimental analysis of Tweets pertaining to COVID-19 in United States
Data Analyst

- Extracted raw data from Twitter using Twitter API and cleaned it into quantitative data using Python and Pandas package. Word2Vec model was used for word processing from the tweets.
- Performed Exploratory Analysis on the data collected from the tweets and the created state wise distribution map of sentiments from tweets related to COVID-19 using Pandas, Matplotlib, and Geopandas.
- Neural network models like LSTM and Transformers were used for text classification to classify the sentiments of the user from the tweets.

PUBLICATIONS

1. Jetpurwala, M., **Sawant, K. R.**, Jain, P. S., & Dedhia, S. P. (2020). Parental perception of the importance of the permanent first molar in their children. Journal of Dentistry for Children, 87(1), 26-30. (Link)

2. **Sawant, K.**, & Pawar, A. M. (2020). Bioactive glass in dentistry: A systematic review. Saudi Journal of Oral Sciences, 7(1), 3. (Link)

3. **Sawant, K.**, Pawar, A. M., Banga, K. S., Machado, R., Karobari, M. I., Marya, A., Scardina, G. A. (2021). Dentinal Microcracks after Root Canal Instrumentation Using Instruments Manufactured with Different NiTi Alloys and the SAF System: A Systematic Review. Applied Sciences, 11(11), 4984. (Link)

4. Pawar, A. M., Khanvilkar, U., Mallishery, S., **Sawant, K.**, Machado, R., Plotino, G. & Shetty, K. P. (2020). Cyclic Fatigue, Torsional Resistance, and Angular Deflection of Two Heat-Treated Files: M-Wire Versus New F-Wire Technology. Metals, 10(10), 1359. (Link)