

MOTHER/ INFANT

HEALTHCARE AND MACHINE LEARNING



V. RATNAM MANTRIPRAGADA

I am a PhD Biomedical Engineer working as a Project Scientist at Cleveland Clinic. I have 5+ years of research experience in the field of stem cells for tissue engineering applications. I strongly believe in the phrase "health is wealth"! I aspire to pursue a career in good data-driven science to help curtail human health issues.

JOAN E. STONE-MAYS

I am an 18 year Administrative Professional with a degree in Finance pursuing a master's degree in Data Science. Currently working in the financial services industry, pursuing a career change to Data Science.

CAROL KADISH

I can be reached on linkedIn as Carol (Pietro) Kadish as well as on GitHub: <https://github.com/cmpietro>. I have 12 years experience as a Business Analyst, am a 200 hr wellness yoga instructor. I enjoy exploring data where science and art meet.

KASHIFA AHMED

I have 3 years experience as a Data Analyst and I am currently doing a Data Analysis Bootcamp at CWRU to enhance my skills. I can be reached at:
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MOHAMMED N. IRSHAD

Proactive achievement driven Supply Chain Manager.
Experienced in leveraging multifaceted competencies and deliver outstanding results aligned to corporate goals and objectives thus adding value to the organization.

HOW TO USE MACHINE LEARNING

Improve healthcare outcomes or predict causes

We reviewed Mom/Baby data from the CDC & microbiome data from mom/baby pairs

- microbiome data: accuracy =78.23%
- Q1_maternal_characteristics: accuracy=83.08%
- Q2_labor_characteristics: accuracy=73.58%
- Q3_delivery_characteristics: accuracy=85.46%

Machine Learning

XGBoost was the model used in all

- Good results were not achieved until we binned the APGAR variable into a binary of < 5 and > 5.

ONE VISUALIZATION

The reason for our project, see if we could identify factors that can help predict APGAR scores, which in turn help predict infant outcomes

