Surry-Activity-1

Liam Surry

2024-09-13

1. Main Area of Research

There is currently a drug crisis with **devastating** socioeconomic impacts. My research interest involves optimizing and applying a capillary electrophoresis mass-spectromety (CE-MS) based approach for large-scale screening of illicit, over-the-counter, and prescription drugs in high-risk populations (low income, homeless,etc). Currently, data pre-processing is **extremely time intensive**, hampering CE-MS's ability for real-world application in the field. My goal is to optimize an existing data-processing script and create a user friendly user interface in addition to optimizing the script to accurately identify drugs and their metabolites. This script will then be applied to a large cohort and extensively tested before being applied in the field. Additionally I will be working with psychiatrists to assess what they desire in such a platform.

2. Favourites

2.1 Favourite Music

1. Even in the Quietest Moments - Supertramp
2. Feels So Good - Chuck Mangione
3. City of Stars - Justin Hurwiz
4. Goddess - Laufey
5. Le festin - Michael Giacchino

2.2 Favourite equation

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

2.3 Favourite Artists

Name	Achievements
Justin Hurwiz	Composer of the musical score for La La land
Hanz Zimmmer	One of the best movie composers, e.g. composition of "Time"
Chuck Mangione	Got #4 on the Billboard Hot 100 chart in 1978 as a jazz musician playing a flugelhorn (never happened before, probably will never happen again)
Bob Ross	Master of painting and sharing the joy of painting

Name	Achievements
Euthymides	Ancient athenian potter and painter of vases famous for painting the vases such as "Achilles and Ajax"

3. A Chunk of Code

```r
groceries<- c(1,2,3,4,5)
cost_dollars <- c(4.99, 2.49, 0.99, 4.99, 13.99)
plot(groceries, cost_dollars)
```