

Applied Data Science Capstone S1

Peer-graded Assignment:
Capstone Project - The
Battle of Neighborhoods
(Week 1)



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Section 1

Instructions

Clearly define a problem or an idea of your choice, where you would need to leverage the Foursquare location data to solve or execute. Remember that data science problems always target an audience and are meant to help a group of stakeholders solve a problem, so make sure that you explicitly describe your audience

and why they would care about your problem.

This submission will eventually become your **Introduction/Business Problem** section in your final report. So I recommend that you push the report (having your Introduction/Business Problem section only for now) to your Github repository and submit a link to it.

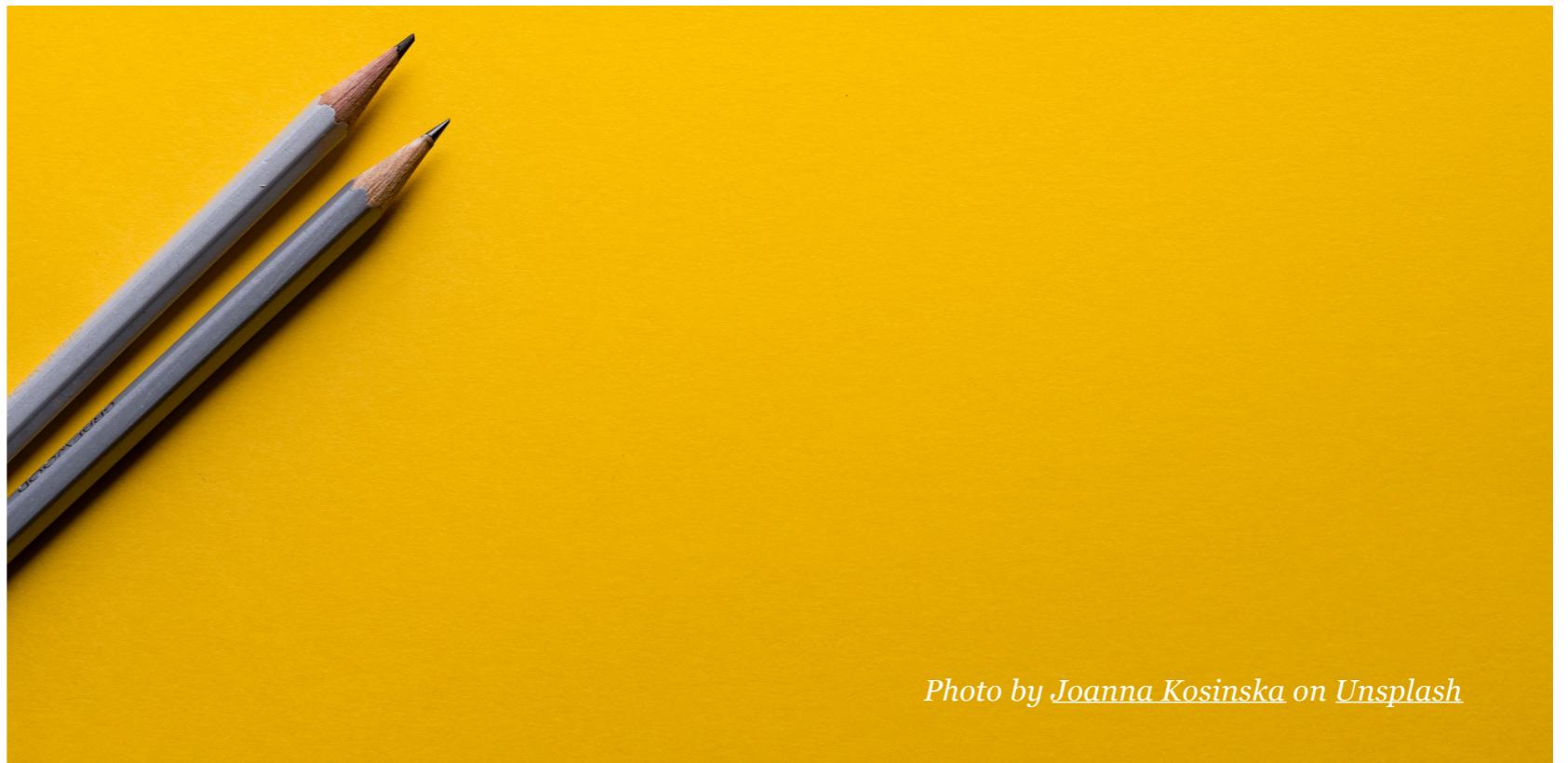


Photo by Joanna Kosinska on Unsplash

Background & Objectives

A description of the problem and a discussion of the background.
(15 marks)

On November 7, 2018, the legalized and regulated sale of Cannabis was approved in the state of Michigan. Currently, Ann Arbor, MI has some of the strictest laws against the use of cannabis (Wikipedia.org).

In contrast, Keego Harbor, MI voted to legalize marijuana for people 21 and older (up to 1 oz.) and only in non-public places (e.g. a house). With the newly found legislation many venture capitalists are trying to leverage the 12.16% of Michiganders who use some form of cannabis ([CBSNews](#)) into a lucrative business.

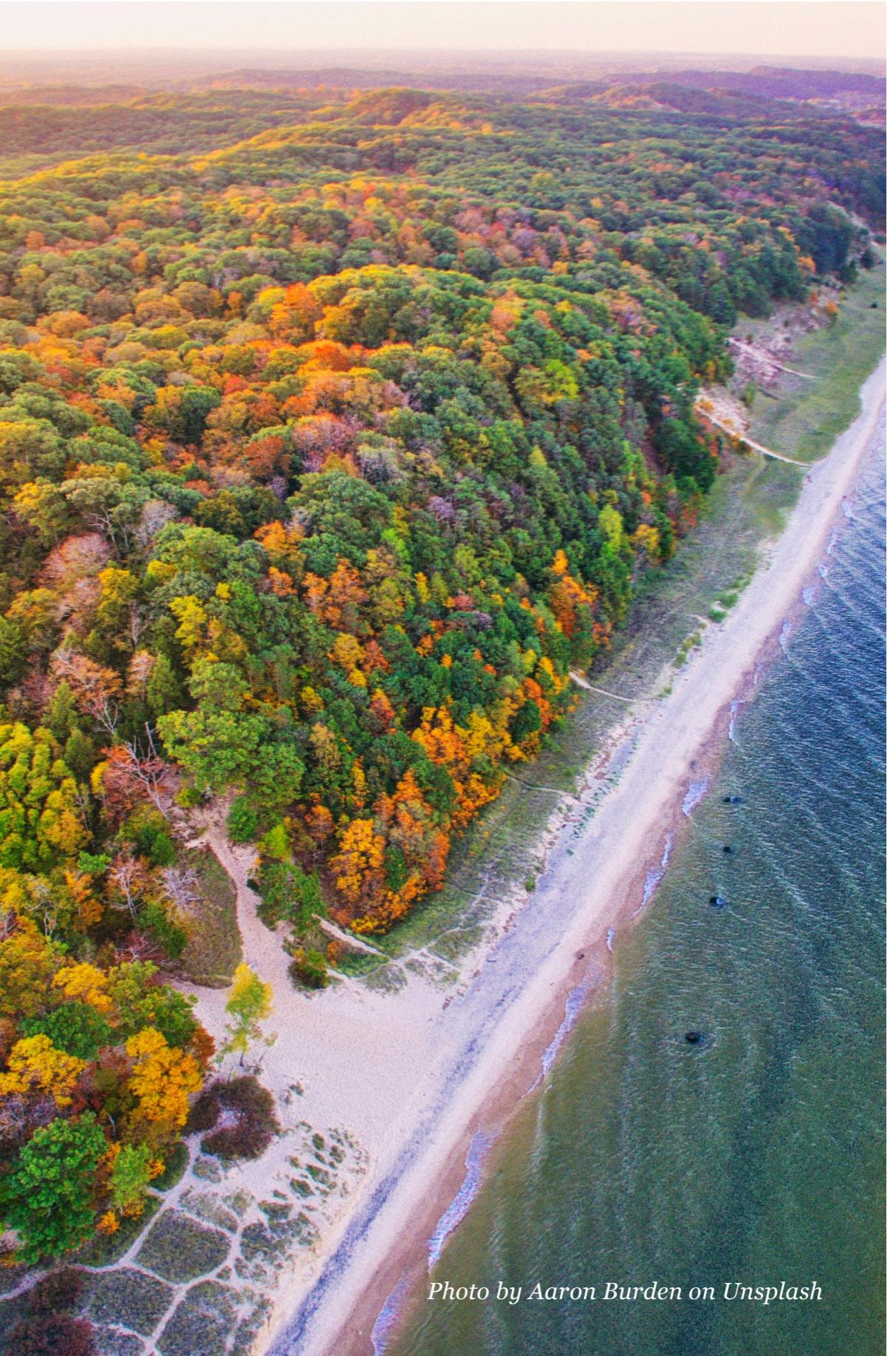


Photo by Aaron Burden on Unsplash

Recently, exclusive projections from the 2018 edition of the Marijuana Business Factbook suggested that retail sales of medical and recreational cannabis in the United States are expected to hit \$8 billion-\$10 billion this year – a nearly 50% increase from 2017 – and rise as high as \$22 billion by 2022 ([MJBizDaily](#)).

One of the fastest growing venture capitalist firms, Nila Bean Inc., believes that the “seed and growth-stage” is best fit for serving an emerging market such as the Cannabis industry. ([CanopyBoulder](#)). Nila Bean’s goal would be to invest at a discounted valuation to achieve outsized returns within the next 5 to 15 years.

Objectives

- Build a leading organic Cannabis farm in Keego Harbor, MI and recruit employees who live within a 100 miles radius. (Data Structured and Unstructured)
- Develop retail store which will specialized in the sale of cannabis products near heavily populated area near Detroit, MI (Leveraging Foursquare location data)

Problem

The executive team at Nila Bean Inc. are cautiously optimistic that with a minimal investment in Keego Harbor, MI makes perfect sense. Furthermore, they have found the entrepreneurs who have the skill to move forward with the opportunity. Entrepreneurs of famed Green & Gold Leaf, a Cannabis farm is looking to relocate and Keego Harbor is ideal. Yet, the Black & Gold Leaf’s leadership team has no data about Michigan let along the city of Keego Harbor as it relates to the Cannabis industry. If the Entrepreneurs at Black & Gold Leaf hopes to secure funding they need to capitalize on the financing that Nila Bean is offering. Black & Gold Leaf requires the expertise to extract the data and communicate the potential of success.

Black & Gold Leaf has decided to hire Dr. Luther Jr., a Data Scientist from a Grey Slate Inc. to provide data to aid in the final investment decision. Dr. Luther Jr. primary objective will be to learn and address the ambiguity concerns linked to the communities of Keego Harbor and Detroit Michigan through analysis of the following:

- Wrangling Structured and Unstructured data
- Understanding the relationships of the data
- Communicating the findings to stakeholders

Work Cited



CBS News. "17 Stoner States: Where's Marijuana Use Highest?" CBS News, CBS Interactive, 25 Oct. 2011, www.cbsnews.com/pictures/17-stoner-states-wheres-marijuana-use-highest/4/.

Daly, Celia. "News & Articles." California Proposition 64, Part III: Revenue – Who Benefits?, go.canopyboulder.com/news/who-is-investing-in-the-cannabis-industry.

McVey, Eli, et al. "Exclusive: US Marijuana Sales May Reach \$10 Billion This Year, \$22 Billion by 2022." Marijuana Business Daily, Marijuana Business Daily, 27 Sept. 2018, mjbizdaily.com/exclusive-marijuana-sales-may-reach-10-billion-this-year-22-billion-by-2022/.