Hvorfor det her relevant? Voksende svampe-community. Det er en livsstil. Kan det inkorporeres i andre apps, så man kan geo-tagge giftige svampe? Så skal hunden jo ikke med derover eller lign. (Appen hedder vild mad)

Hvad skal navnet være?

Have med, at dataen er fra Argentina af 23? forskellige underarter af svampene. Er svampene anderledes andre steder i verden? ja

Hvor skal konfidensintervallet lægge?

farveblinde???

Måske have advanced functions til de arbejdstunge ting som at skære svampen op og test for printet af “spores” og dens farve.

Oplagt måde at viderudvikle appen på er ved image recognition

Executive Brief

In recent years, there has been a growing interest in wildlife and foraging, particularly in the field of wild mushrooms (<https://www.washingtonpost.com/magazine/2022/08/15/wild-foods-foraging-eating-healthy/>

<https://metro.co.uk/2022/08/09/foragers-explain-why-they-love-ingredient-picking-and-how-to-be-safe-17142491/>). With this trend, there is an emerging need for a mobile application which quickly and accurately may identify whether a mushroom is poisonous or safe for consumption, based on its physical characteristics. To identify the feasibility of this prospect, to identify the edibility of the user described mushrooms, this project seeks to create a supervised machine learning model, which can classify mushrooms as edible or not, within a safe margin of error.  
 To test the functionality of a possible model, a data set consisting of 23 different mushroom sub species found in Argentina is chosen. Therefore, even if the model proves successful, it must be trained on new relevant datasets first before being applied at other locations.

# Motivation

The motivation behind building a machine learning model for detecting poisonous mushrooms stems from several key factors in today's market landscape which indicates a demand for such an extension of the already developed forage market. The potential commercialization will happen through a phone app, while the model produced for this brief is created to show the possibility of the phone app’s main function and likewise other possible applications for our model.

Market trends show a significant increase in the public's interest in foraging beginning in 2020 during Covid-19. People are increasingly eager to explore and understand wild mushrooms. In our digital age, we want to create a digital solution to enhance outdoor experience. An app to detect poisonous mushrooms could cater to this demand by providing instant and reliable information to users who wish to identify the mushrooms they encounter during their outdoor adventures.

The proposed app could offer several functions to address market needs. Its primary feature would be the ability to identify whether a mushroom is poisonous or safe for consumption based on descriptions of its physical characteristics.

Furthermore, incorporating geotagging features into the app would for instance be beneficial to dog owners, allowing them to mark locations where poisonous mushrooms have been found. This information could be shared with other users, creating a community-driven map of mushroom danger zones. This feature would also make the app seamlessly integrate with existing wild food foraging applications, creating a comprehensive ecosystem for users.

In terms of revenue streams, several options could be explored. A freemium model could be implemented, offering a free version of the app with basic features like mushroom identification, while premium features, including geotagging, integration with other apps, and advanced identification algorithms, could be accessible through a subscription model.

In-app advertising could also be leveraged by collaborating with outdoor gear brands, local farms, or relevant product and service providers. Additionally, partnerships with organizations that promote wild food foraging or pet safety could be pursued to expand the user base and revenue potential of the app.

In the future, we might also want to explore the possibility of adding a recommender system. With this project we aim to create a proof of concept with our classifier, educating users on which mushrooms are edible. Once we have user data and location data of mushrooms, we could use a recommender system to inform them of local mushrooms.

# Process

Why is the model/methods we choose cool and reliable? real life examples?

# Findings