# Production Project Report

## Introduction

As financial markets become increasingly complex the demand for financial management tools grows. Financial

implementation of supervised machine learning in financial assistance applications has the potential to revolutionize financial management by providing users with intelligent insights, predictive analysis, and automated decision-making support.

This report aims to test the effectiveness of using supervised machine learning to provide financial advice. The models will provide financial advice in 3 key areas: income and expense prediction; budget recommendations; and anomaly detection on spending. For each area of financial advice there will be 3 supervised machine learning models tested.

Report structure

1. Introduction
   1. Background and motivation
      * Why personal finance is important
      * Challenges for managing finances
      * Define the problem
      * Goals for the project
   2. Problem statement
   3. Goals and questions
   4. Limitation from spec
   5. How report will look
2. Literature Review
   1. Applications of machine learning in finance
   2. Applications in 3 topic areas
   3. Technology review of ML in finance
   4. Summarise findings
3. Technical review
   1. Applications of machine learning in finance
   2. Applications in 3 topic areas
   3. Technology review of ML in finance
   4. Summarise findings
4. Methodology and design
   1. Overall architecture
   2. Data selection
   3. Data Pre-processing
5. Implementation and testing
6. Product evaluation
7. Project evaluation
8. Summary

Background and motivation 1.1:

Report structure

No1