

# RStudio 2020 Internship Application

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# Contents



# Chapter 1

## Overview

Start the video below for a 2 minute overview of what you are currently looking at:

The video is best viewed in fullscreen, hover over the window above for the option



## Chapter 2

# What makes me a good fit

Here are some of the things I believe make me a great fit for the internship:

### 2.1 I .Rmd files

I was completely blown away by the R Markdown file format when I first discovered it, and I definitely felt like the courses I took in college in R should have mentioned the .Rmd format, as well as the tidyverse and the idea behind the pipe operator. I have spent a lot of my time learning R Markdown and digging through books and amazing resources made available by RStudio, so here are some of my favorite output formats that I am looking to teach people more about:

#### 2.1.1 Learnr

I have been using learnr for about a year and a half, and recently I started to offer programming tutorials on my website using learnr where every time the tutorial is opened, users learn to program in R using data from the cryptocurrency markets that is never outdated by more than 1 hour:

(this takes about 30 seconds to load, give it more time if it's showing up blank)

R Basics

Introduction

R Basics

Work with real data

Installing Packages

Data Manipulation

Analysis

Introduction

Welcome to this interactive cryptocurrency tutorial around the R programming language!

Welcome! This tutorial is not meant to be an extensive guide to programming in R. The goal is to provide you with a highly interactive tutorial that is setup to teach you just what you need to know before walking you through some real examples using cryptocurrency markets data that is never outdated by more than one hour from when you start the tutorial.

Tutorial refreshed:

## [1] "2020-03-04 16:07:49 UTC"

Throughout the tutorial, you will encounter code blocks that you can interact with like the one below. The interactive editor will execute the R code once you press the **Run Code** button (or `ctrl + enter`), and the output will display underneath the code editor box. Give it a try, and replace `1 + 1` with `4 + 1`, and execute the code and see if the output changes as expected. To confirm your answer, press the **Submit Answer** button.

Execute Your R Code Below

1

1 + 1

2

3

Run Code

Submit Answer

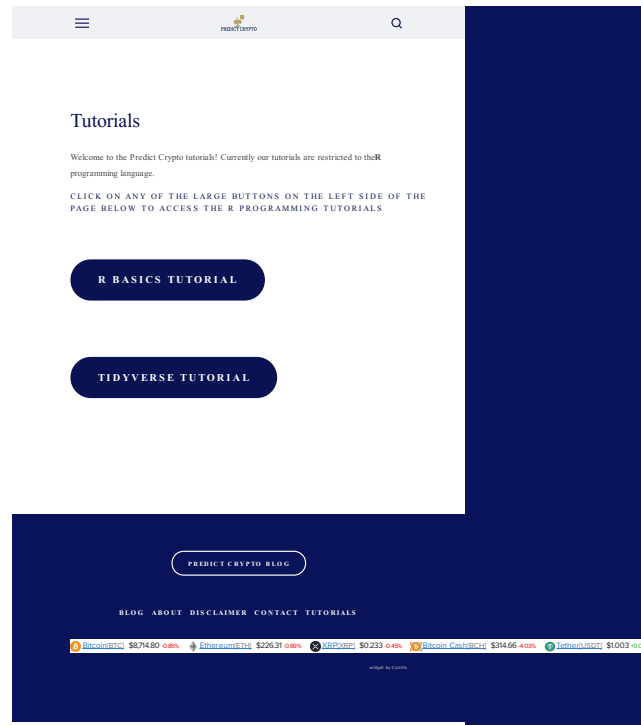
If you are already familiar with using functions, assigning variables and basic data types you can skip ahead to the section where you start working with cryptocurrency data no older than 1 hour.

If you are just here for the cool stuff, check out the section around visualisation.

Continue



I would recommend looking at the **Visualization** section to visually see that the data is never outdated by more than 1 hour.



I post these on my website:

I'm loving the integrated tutorials tab within RStudio in the 1.3 preview and I am working towards including these with my `PredictCrypto` package, which I talk more about and use in the next section of this document.

### 2.1.2 Bookdown

I was very close to paying for a monthly subscription on [gitbook.com](https://gitbook.com) because I thought it was such an amazing format to provide documentation through, so I was particularly impressed by and grateful for the bookdown (?) package, and these days it's my go to for organizing most things I work on, so why not my application?

This document is obviously an example of a bookdown document in itself, but here's another guide I put together using bookdown:

## Predict Crypto Database Quick Start Guide

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2020-03-04

### 1 Overview



This is a quick start guide for the [Predict Crypto DataBase](#) which should provide the support you need to interact with the database and pull data. Everything you need to know will be outlined in this document and you can use the sidebar on the left ( `s` is the hotkey to show/hide it) to review the following sections:

This guide refreshes daily in order to show a preview of the latest data within the document and you can look at the [GitHub Actions](#) daily runs here. You can also see the refreshed data in the *useful tables* section of the document.

I also found that documentation done in bookdown can work really great when working within a large company as well, and I put together some very thorough documentation for a project using bookdown that was very well received (but I can't show here). In my particular case it worked really well because I could send the link to the html index of the bookdown document and when opened it would behave like a website hosted on the shared folders within the secure network which ended up being particularly simple and effective.