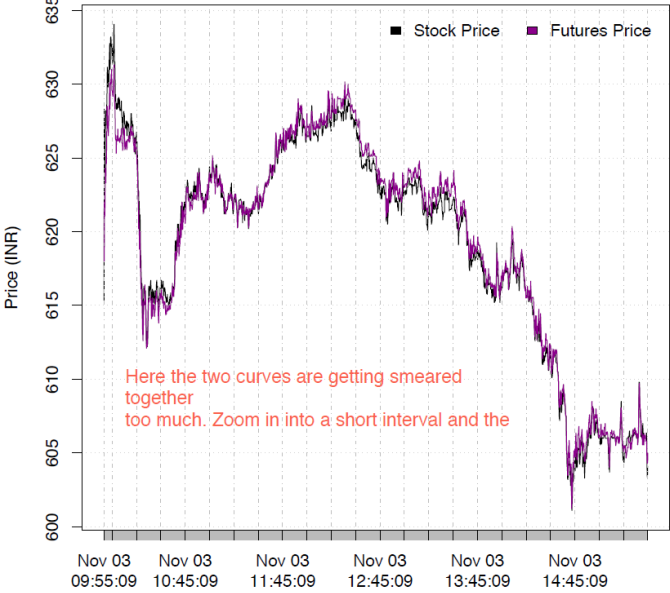
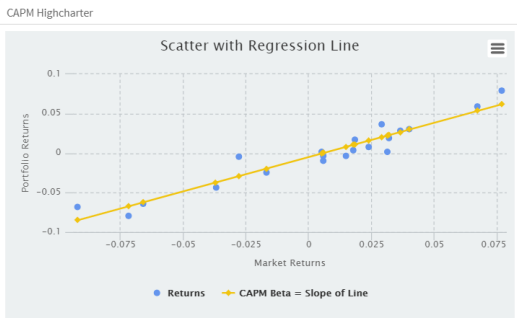


# Summer Internship Project Summary

Vedant Bonde, Roll No. 11743

Project ID (Roll No.)	11743																																																						
Project Name	Machine Learning and Statistical methods in Finance																																																						
Project Member	Vedant Bonde																																																						
Abstract	<p>The project involved finding various machine learning and statistical techniques to study about the tools used in financial industry. The first step was to acquaint student about various techniques used like Efficient Frontier, Portfolio Optimization etc. Then, a specific field in Finance was chosen and through the methods of literature review, code overviews etc, the intern was expected to find out specific statistical properties in time series analysis of Indian stocks so people could keep track of their portfolios and calculate optimum weights to keep their portfolio in check.</p>																																																						
Project Photos	<div style="text-align: center;"> <p><b>Stock price vs futures price, TCS</b></p>  </div> <div style="border: 1px solid #007bff; padding: 5px;"> <p><b>Capm Beta</b> <span style="float: right;">Click submit to calculate the CAPM Beta of your portfolio</span> <span style="float: right;">Source Code</span></p> <table border="0" style="width: 100%;"> <tr> <td style="width: 30%;">Stock 1</td> <td style="width: 15%;">Portf. %</td> <td style="width: 55%;"></td> </tr> <tr> <td>SPY</td> <td>25</td> <td></td> </tr> <tr> <td>Stock 2</td> <td>Portf. %</td> <td></td> </tr> <tr> <td>EFA</td> <td>25</td> <td></td> </tr> <tr> <td>Stock 3</td> <td>Portf. %</td> <td></td> </tr> <tr> <td>IJS</td> <td>20</td> <td></td> </tr> <tr> <td>Stock 4</td> <td>Portf. %</td> <td></td> </tr> <tr> <td>EEM</td> <td>20</td> <td></td> </tr> <tr> <td>Stock 5</td> <td>Portf. %</td> <td></td> </tr> <tr> <td>AGG</td> <td>10</td> <td></td> </tr> <tr> <td colspan="3">Starting Date</td> </tr> <tr> <td colspan="3">2018-01-01</td> </tr> <tr> <td colspan="3" style="text-align: center;"><b>Submit</b></td> </tr> </table> <div style="margin-top: 10px;"> <p>CAPM Highcharter</p>  <table border="1" style="margin-top: 10px; width: 100%; border-collapse: collapse;"> <thead> <tr> <th>term</th> <th>estimate</th> <th>std.error</th> <th>statistic</th> <th>p.value</th> </tr> </thead> <tbody> <tr> <td>alpha</td> <td>-0.0050</td> <td>0.0027</td> <td>-1.8566</td> <td>0.0798</td> </tr> <tr> <td>beta</td> <td>0.8690</td> <td>0.0613</td> <td>14.1714</td> <td>0.0000</td> </tr> </tbody> </table> </div> </div>	Stock 1	Portf. %		SPY	25		Stock 2	Portf. %		EFA	25		Stock 3	Portf. %		IJS	20		Stock 4	Portf. %		EEM	20		Stock 5	Portf. %		AGG	10		Starting Date			2018-01-01			<b>Submit</b>			term	estimate	std.error	statistic	p.value	alpha	-0.0050	0.0027	-1.8566	0.0798	beta	0.8690	0.0613	14.1714	0.0000
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