Hi Liam,

We developed a Cell Tower Antenna Azimuth Estimation system based on LiDAR but could not take off because the sensors are not capable of create the 3D point clouds as advertised. We couldn’t risk purchasing the sensors due to current customer feedback.

There is a technique based on 2D images and UVA IMU Data that we would like to work on for 4 weeks. Would you know if SA mobile operators could be interested in our solution? Would like to assess the development risk before investing our time into this.

Maths

<https://projecteuler.net>

Linear Algebra

<http://ee263.stanford.edu/>

Convex Optimisation

<https://www.class-central.com/course/stanford-openedx-convex-optimization-1577>

Lesson 1:

<https://lagunita.stanford.edu/courses/Engineering/CVX101/Winter2014/courseware/7206c57866504e83821d00b5d3f80793/a87df9fb325c4bf49c3cd10a1681a6eb/>

<https://see.stanford.edu/Course/EE364A/85>

<https://see.stanford.edu/Course/EE364A>

Airwide

<https://en.wikipedia.org/wiki/Levenberg%E2%80%93Marquardt_algorithm>

<http://mathworld.wolfram.com/Levenberg-MarquardtMethod.html>

PHD Level Mathematics

<https://www.reddit.com/r/MachineLearning/comments/51qhc8/phdlevel_courses/>

<https://www.reddit.com/r/math/comments/4kzg0g/progression_for_optimization/>

<https://www.reddit.com/r/stanford/comments/95j3r7/stats_courses/>

<http://web.stanford.edu/class/ee364a/course>

comparison between electrical and mechanical antenna tilt angle in sulaymaniya mobile phone base stations

Implementing a Tilt-Compensated eCompass using Accelerometer and Magnetometer Sensors

They want to monitor the following on servers running win server os:

1) SQL databases

2) CPU usage

3) Memory usage

4) VMWARE, vcpus, vmemory

Network Management System

<https://www.percona.com/blog/2016/02/29/graphing-mysql-performance-with-prometheus-and-grafana/>

<https://github.com/percona/grafana-dashboards>

<https://pmmdemo.percona.com/graph/d/Fxvd1timk/home-dashboard?orgId=1>

<https://www.percona.com/doc/percona-monitoring-and-management/index.html>

<https://www.stitchdata.com/integrations/sql-server/grafana/>

<https://www.percona.com/blog/2019/01/31/new-dashboard-to-monitor-memory-usage-pmm-plugin/>

<https://github.com/Microsoft/mssql-monitoring>

<https://techcommunity.microsoft.com/t5/DataCAT/bg-p/DataCAT>

<https://grafana.com/dashboards/409>

<https://grafana.com/dashboards/4589>

<https://wiki.opennms.org/wiki/Grafana>

MS SQL Server Setup

<https://www.quora.com/What-is-the-best-place-to-practice-MS-SQL-for-bigners/answer/Tung-Thanh-6>

<https://github.com/Microsoft/mssql-monitoring>

<https://github.com/influxdata/telegraf/tree/master/plugins/inputs/sqlserver>

Microsoft SQL Server Monitoring

<https://www.influxdata.com/time-series-platform/telegraf/>

<https://github.com/influxdata/telegraf/tree/master/plugins/inputs/sqlserver>

<https://portal.influxdata.com/downloads/>

<https://docs.microsoft.com/en-us/sql/relational-databases/system-dynamic-management-views/system-dynamic-management-views?view=sql-server-2017>

<https://www.influxdata.com/>

Microsoft SQL Server Monitoring – Github

<https://github.com/denzilribeiro/sqlmimonitoring>

Bandwith

<https://grafana.com/dashboards/5217/revisions>

<https://grafana.com/docs/features/datasources/influxdb/>

<https://blogs.msdn.microsoft.com/sqlcat/2018/09/26/real-time-performance-monitoring-for-azure-sql-database-managed-instance/>

<https://docs.microsoft.com/en-us/azure/azure-monitor/insights/azure-sql#managed-instance-and-databases-in-managed-instance-view>

Docker

<https://linuxconfig.org/how-to-install-docker-on-ubuntu-18-04-bionic-beaver>

Influx

<https://www.techietown.info/2017/03/using-influxdb-commandlineshell-client-influx/>

<https://hub.docker.com/_/influxdb>

<https://grafana.com/docs/features/datasources/influxdb/>

SQL SERVER

USE master;   
CREATE LOGIN telegraf WITH PASSWORD = N'MyComplexPassword1!', CHECK\_POLICY = ON;   
GRANT VIEW SERVER STATE TO telegraf;   
GRANT VIEW ANY DEFINITION TO telegraf;

<https://blog.laputa.io/try-influxdb-and-grafana-by-docker-6b4d50c6a446>

<https://stackoverflow.com/questions/30853247/how-do-i-edit-a-file-after-i-shell-to-a-docker-container>

Microsoft SQL Server Monitoring

<https://techcommunity.microsoft.com/t5/DataCAT/Real-time-performance-monitoring-for-Azure-SQL-Database-Managed/ba-p/305537>

Zabbix

<https://grafana.com/plugins/alexanderzobnin-zabbix-app/installation>

grafana-cli plugins install alexanderzobnin-zabbix-app

<https://serverfault.com/questions/908141/docker-pull-tls-handshake-timeout>

**Bob Marley Lyrics**

Mm-mm-mm-mm-mm-hm! Ooh-oo-oo-oo-er. Mm-mm-mm.  
Jah would never give the power to a baldhead  
Run come crucify the Dread.  
  
Time alone - oh, time will tell:  
Think you're in heaven, but ya living in hell;  
Think you're in heaven, but ya living in hell;  
Think you're in heaven, but ya living in hell.  
Time alone - oh, time will tell:  
Ya think you're in heaven, but ya living in hell.  
  
Back them up; oh, not the brothers,  
But the ones who sets 'em up.  
  
Time alone - oh, time will tell:  
Think you're in heaven, but ya living in hell;  
Think you're in heaven, but ya living in hell;  
Think you're in heaven, but ya living in hell.  
Time alone - oh, time will tell:  
Ya think you're in heaven, but ya living in hell.  
  
Mm-mm. Mm-mm.  
Oh, ma ...................  
Oh, ma ...................  
Oh, ma children are cryin'.  
Oh, children, weep no more!  
Oh, ma sycamore tree, saw the freedom tree.  
All you ... have spoke:  
Oh, children, weep no more;  
Weep no more: children, weep no more!  
  
Jah would never give the power to a baldhead  
Run come crucify the Dread.  
  
Time alone - oh, time will tell:  
Think you're in heaven, but ya living in hell;  
Think you're in heaven, but ya living in hell;  
Think you're in heaven, but ya living in hell.  
Time alone - oh, time will tell:  
Think you're in heaven, but ya living in hell.