

Antenna Alignment Augmented Reality Video Application

Final Year Project

Chris cornwall

12311016

15/04/2018

Contents

[Introduction 2](#_Toc509874267)

[Project Description 2](#_Toc509874268)

[Description 2](#_Toc509874269)

[State of the Art Review 2](#_Toc509874270)

[Implementation 2](#_Toc509874271)

[Evaluation 2](#_Toc509874272)

# Introduction

# Description

“Antenna Alignment Augmented Reality Video Application (Smartphone or Drone derived Video). The goal is to develop a novel smartphone application that uses augmented reality techniques to help with the alignment of highly directional microwave dish antennas. High speed fixed wireless point to point links use very high gain and directional dish type antennas that have often have a very narrow beamwidth so precise alignment in both the horizontal and vertical planes can be very difficult, especially when working at height on a telecoms tower or rooftop. The application would be used to provide visual clues to help engineers with the initial alignment of the antenna as well as information on the expected signal strength based on the distance and power budget calculations. The video source could be the camera on a mobile phone or video being streamed live from a GPS enabled drone.”

# State of the Art Review

# Implementation

# Evaluation