**Adaptive Array Signal Processing**

**[5SSC0]**

**Assignment 1, B: Beamformer design**

**REPORT**

**Group number:**

**Names including ID:  
 1:  
 2:**

**Date:**

## 1.2 Scenario 1: Narrowband beamformers




2. Beampattern of 4 sensor ULA side-by-side with beampattern plot of a)

|  |
| --- |
| *Insert plot of beampatterns here* |

1. Steered response: unit response at 30°

|  |
| --- |
| *Insert plot and comments here* |

1. Steered response: unit response at 30°, ULA rotated by 90°

|  |
| --- |
| *Insert plot and comments here* |

1. Steered response: unit response at 30°, zero response at -60°

|  |
| --- |
| *Insert plot and comments here*  If moves closer to,… |

1. Steered response square array: unit response at 30°, zero response at -60°

|  |
| --- |
| *Insert plot and comments here* |

1. Steered response square array for different frequencies

|  |
| --- |
| *Insert plot and comments here* |
| *Insert plot and comments here* |

i) Describe your method below

|  |
| --- |
|  |

## 1.3 Scenario 2: Delay and Sum Beamformer

2. for and

|  |
| --- |
| *Insert plots here* |



|  |
| --- |
| *Insert plot and comments here* |