

Responses cannot be edited

## Propose a vacation student project for Summer 2017

Deadline for making your proposal(s): 09:00 Monday 10 April. This is a hard deadline.

Please fill in and submit this form multiple times for multiple proposals. Any queries, do ask - Toby.

### Project supervisor email \*

ian.cottam@manchester.ac.uk and mike.keeley@manchester.ac.uk

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### Title and objective of the project \*

Set up Raspberry Pi's for new student intake (2017-18). Some 260 Pi's need to be set up - mainly to run on the School's Raspberry Pi network - with IP addresses, DHCP, labelling, checking out, etc. New for this year is to evaluate if we can use NetReg for IP/MAC registration on first use. The back out position is installation as per previous years.

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### Number of students requested (with justification if more than 1) \*

1

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### Start date, end date, total duration (weeks) \*

12 June 2017 for 3 weeks

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### The benefit to the School \*

This will free up Tech Support Staff and IT Staff to do other important work. And, clearly, the Pi's and Pi network will be ready for the new intake in September 2017.

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## The benefit to the student \*

By the end of this project the student will be a networking expert, as well as thoroughly familiar with debugging Raspberry Pi and Linux connectivity issues.

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## Skills needed by the student. \*

General experience with Raspberry Pi.

Familiarity with wired networking: MAC addresses; IP addresses; DHCP; etc. Linux command line skills. A little SQL / DB experience would be useful. A little Bash scripting.

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## Details of the work that the student would do \*

The work and main process is documented here:

[https://wiki.cs.manchester.ac.uk/staff/index.php/SoCS\\_Systems/Raspberry\\_Pi\\_Network](https://wiki.cs.manchester.ac.uk/staff/index.php/SoCS_Systems/Raspberry_Pi_Network).

New work involving NetReg will be closely supervised by Mike Keeley.

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## Infrastructure requirements and any required staff support other than the project supervisor \*

Tech Support will order the Pi's. Mike Keeley from IT is co-supervisor.

## Supervision arrangements throughout the duration of the project (named staff and dates covering the entire duration) \*

Ian Cottam from Tech Support and Mike Keeley from IT (throughout the 3 week period).

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## Location of the project work (building/room) \*

One of the Labs on the Lower First where the Pi Network is.

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