
**JUSTIFICANTE DE LA PROPUESTA DE TEMAS DE TRABAJO FIN DE ESTUDIOS
TRAMITADA POR EL PROFESOR**

Curso académico: 2015-16

Titulación: Grado en Ingeniería Electrónica Industrial y Automática

Datos del profesor

Persona que ha tramitado la propuesta: CARLOS ELVIRA IZURRATEGUI

Departamento: INGENIERÍA ELÉCTRICA

Fecha y hora de validación de la propuesta: 04/12/2015 15:22

Datos de la propuesta

Código: 16014-805G

Tema propuesto: Design and development of a low cost microprocessor KVM system over IP

Tutor/es:

CARLOS ELVIRA IZURRATEGUI

SILVANO NÁJERA CANAL

Tipo de trabajo: No concertado

Breve descripción: This finish grade work includes de design and development of a signal transmission system applied to the main peripheral devices: keyboard, mouse and monitor (KVM). The three signals must me conected with several servers and / or personal computers located in the rack. The control system will be based on a low cost Open-source hardware (Arduino / Raspberry, etc ...), and it will allow multiplexing the KVM signals between all the personal computers using Ethernet technology.

Objetives: - Study of the actual infraestructure (servers, rack, ...). - Design the hardware to capture kvm signals. - Program the low cost open-source hardware to allow multiplexing KVM signals. - Develop a prototype installed in the rack. - Check the prototype for further assembly in series.

Idioma/s: Castellano

Propuesta de seguimiento: Tutors will schedule all the tasks in order to meet the objectives. Student will show the tutor all the scheduled tasks. All the tasks will be deploy in the L123 laboratory (Polytechnic Building). Student an tutors will use colaborative resources to establish contact.

Requisitos: Students interested in this finish grade work must initiate contact with the tutor. The students must have passed all the courses in the first three years of the schedule planning grade. What a student must know:

- Arduino/Raspberry programming knowledge and interest in.
- Network services.

- Basic electronic instrumentation hardware knowledge.
- Basic 3D spatial design.

Nº. Plazas ofertadas:

- Libres: 1
- Concertadas: NO