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|  | **HASAN KALYONCU UNIVERSITY**  **Computer Engineering Department** **CENG 499 Project Proposal Form** |

**Part I. Project Proposer**

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**Part II. Project Information**

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| **Starting Term** | |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | 2 | 0 | 2 | 1 | / | 2 | 0 | 2 | 2 | |
| **Title of the Project** | Mobile-based Intelligent medicine recognition system with virtual reality |
| **Project Description** | |
| The Project aim at developing an application for medicine recognition and identification, then show in virtual reality information about this medicine. The user can take a photo of the medicine then the application will recognise the medicine and show information of the system like usage and doses, expiry date (if applicable ) etc.  The project will explore the implementation of the software on the android/iOS mobilephone.  Also, machine learning techniques like Deep learning, visual coding, ensemble learning will be explored and one of them will be selected. | |
| **Project Justification** | |
| **Novelty** | |
| **New aspects** | The aimed software application is a challenging problem since it includes object recognition applications. The software will reside in the mobile device itself. |
| **Complexity** | |
| **Challenging problem and issues** | The student will deep learning and image analysis programming teachniques He/she also to master mobile and android programming. |
| **Related computer science fields and subfields** | Computer Graphics, Machine learning, image procesing and analysis. |
| **Tools** | Python and/or C++ programming, Android programming, Open CV |
| **Risk involved** | |
| **Potential problems and alternative solutions** | Students need to study the interface design in addition to their expected skills from Computer Engineering courses. |
| **Minimum work required** | 3-4 months |