

وزارة التعليم العالي والبحث العلمي العراق جامعة بابل كلية تكنولوجيا المعلومات قسم شبكات المعلومات الدراسة (صباحي)



موقف سيارات ذكي يعتمد على إنترنت الأشياء

## Smart car park based on internet of IOT

مشروع التخرج هو احد متطلبات الحصول على درجة البكالوريوس في تخصص شبكات المعلومات في تكنولوجيا المعلومات.

A Graduate Project Submitted to the department of Information Networks of the College of Information Technology, University of Babylon, in Partial Fulfillment of the Requirements for the Bachelor's degree in the Information Networks of Information Technology.

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## Abstract

We thank God who has enabled us to provide a simple service to our beloved country through the Smart Parking Project, based on Internet of Things (IoT) technologies utilizing Arduino to connect parking spaces to the network, enabling drivers to know the availability of parking spaces through a mobile application. In our daily lives, some struggle to find empty parking spaces, hindering the departure process. When a group of people enter, the difficulty increases, consuming a lot of time and effort, in addition to its impact on mental well-being. With the increasing number of cars and people going about their daily activities, traffic congestion worsens, making finding parking spaces a daily challenge. Our system contributes to efficiently managing parking spaces and reducing congestion, providing comfort to users and making the process more effective. We thank God for the success of our work and ask for His continued guidance and success. Thanks to our professors who supported us throughout our journey, especially Dr. Ola Ali Obeid, who supervised this project. We appreciate the efforts of our colleagues who stood by us in this exciting journey.