EEE4022S Project Proposal 24 July 2019

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Title	Micro-payment through block-chain and payment channels for IoT
Description	Use the Bitcoin Lightning Network to enable micro-transactions for pay-as-you go services or device-to-device transactions. This can include charging users as they scroll through an article rather than charging them for the whole article up front. This can also be used with IoT devices in the following way: a user can be billed incrementally through micro-payments for using a device or can even be paid through micro-payments for providing a service through an IoT device. It could also be extended to charging users of a resource on a pay-as-you-consume basis for something like electricity, water or sensor data. This project involves implementing such a system and comparing it to current available systems that use traditional payment methods.
Deliverables	Implementation of a system that enables IoT devices to facilitate micropayments using Bitcoin and the Lightning Network. This will allow users to pay on a pay-as-you-consume basis.