

# Millennium Falcon

Indian Institute of Technology, Jodhpur

Website: <http://voting-vader-iitj.southeastasia.cloudapp.azure.com/>

Github Repo: <https://github.com/anshulahuja98/CFD-19-IITJ>

Demo Video: <https://www.youtube.com/watch?v=oYs3sAa2E6w&feature=youtu.be>

## Team Members

- Anshul Ahuja
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- Siddhant Saoji

## Secure IoT & Blockchain based EVMs

Our proposed solution is based on the feasibility of implementation. It is very much difficult to change the whole voting process given the Indian demographics and the diversity of Indian society especially in terms of geography and literacy levels. It is a very difficult hurdle to educate people about any change in the voting process.

We intend to make the voting process much more transparent and fairer at the base level.

Using **Azure Blockchain service** as the backend to ensure that data is secure, we have developed an IoT based EVM using **Raspberry Pi** as the system brain. The EVM uses technologies such as **RFID** to ensure security at the actual physical level.

\* We later intend to replace **Raspberry Pi** with **AzureSphere** to increase the security even further.

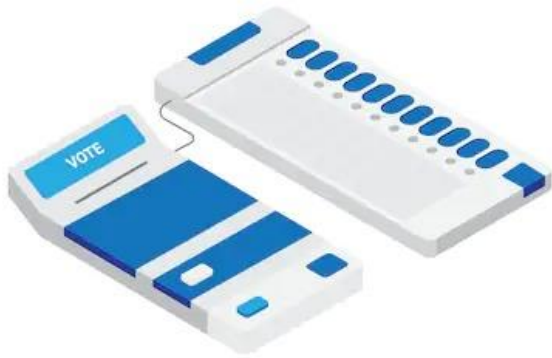


## Platform Agnostic Back-End

Using **Azure Blockchain Workbench** based on **Azure Blockchain service**, we have exposed **REST API** endpoints to transact on the blockchain. This will ensure the ability to make it versatile to cope with diverse types of voting platforms be it web or app.

Eventually, we have ended up speeding up the vote-counting process while maintaining transparency at every level voted through our EVMs. We plan to later integrate our solution

with present paper trail solutions. Currently, we have maintained the highest level of security possible in our API calls from **Raspberry Pi** by using a token and certificate-based authentication for API calls.



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