

### **FACULTY MENTOR**

Hessenauer, Sam

### **PROJECT TITLE**

Blockchain AR Collectibles

### **PROJECT DESCRIPTION**

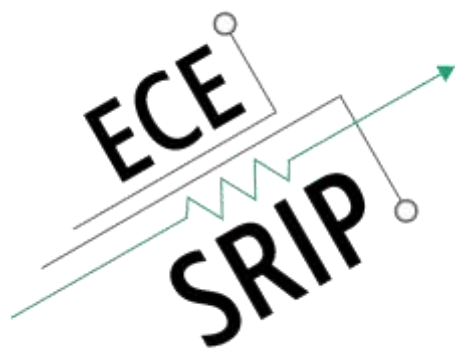
Create an ERC721 Ethereum contract to give ownership to collectible 3D objects of Molecular Structures (PDB). With this contract as a basis for ownership, create an AR application on any mobile operating system to project the 3D objects atop QR codes. Each QR code should be the encoding of the object stored on the ERC721. Using either Iphone/Android ARkit, Magic Leap, Windows MR, HTC Vive Pro

### **INTERNS NEEDED**

3 BS or MS students

### **PREREQUISITES**

Understanding of Javascript, Basic iOS/Android Programming



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### **PROJECT TITLE**

Machine Learning on 3D protein models for Binding Sites

### **PROJECT DESCRIPTION**

Build a ML Service that takes in a PDB or SDF (Molecular file) and identifies the top binding sites based on open-source libraries. Output the PDB with appropriate suggested/highlighted binding sites with potential small molecule compound suggestions for each of the sites.

### **INTERNS NEEDED**

2 BS or MS students

### **PREREQUISITES**