title: Ethereum for Ruby Developers description: Learn how to develop for Ethereum using Ruby-based projects and tooling. lang: en incomplete: false

Learn how to develop for Ethereum using Ruby-based projects and tooling.

Use Ethereum to create decentralized applications (or "dapps") that utilize the benefits of cryptocurrency and blockchain technology. These dapps can be trustless, meaning that once they are deployed to Ethereum, they will always run as programmed. They can control digital assets to create new kinds of financial applications. They can be decentralized, meaning that no single entity or person controls them and are nearly impossible to censor.

Getting started with smart contracts and the Solidity language {#getting-started-with-smart-contracts-and-solidity}

Take your first steps to integrating Ruby with Ethereum

Need a more basic primer first? Check outethereum.org/learn or ethereum.org/developers.

- Blockchain Explained
- Understanding Smart Contracts
- Write your First Smart Contract
- Learn How to Compile and Deploy Solidity

Beginner articles {#beginner-articles}

- Finally understanding Ethereum accounts
- Finally Authenticating Rails Users with MetaMask
- Sign-In with Ethereum Ruby Library and Rails Examples Release
- How to connect to the Ethereum network using Ruby
- How to generate a new Ethereum address in Ruby

Intermediate articles {#intermediate-articles}

- Blockchain App with Ruby
- Use the Ruby, connected to Ethereum, to execute the Smart Contract

Ruby projects and tools {#ruby-projects-and-tools}

Active {#active}

- eth.rb Ruby library and RPC-client to handle Ethereum accounts, messages, and transactions
- keccak.rb The Keccak (SHA3) hash used by Ethereum
- siwe-ruby Ruby implementation of Sign-In with Ethereum
- siwe rails Rails gem that adds SIWE local sign in routes
- siwe-rails-examples SIWE example using Ruby on Rails with custom controller
- omniauth-siwe OmniAuth strategy for Sign In With Ethereum (SIWE)
- omniauth-nft OmniAuth strategy for authenticating via NFT ownership
- ethereum-on-rails Ethereum on Rails template which allows to connect MetaMask to Ruby on Rails

Archived / No longer maintained {#archived--no-longer-maintained}

- web3-eth Calling RPC methods of Ethereum node with Ruby
- ethereum_tree Ruby library to generate ETH addresses from a Hierarchical Deterministic wallet according to the BIP32 standard
- etherlite Ethereum integration for Ruby on Rails

- ethereum.rb Ruby Ethereum client using the JSON-RPC interface for sending transactions, creating and interacting with contracts as well as useful toolkit to work with Ethereum node
- <u>omniauth-ethereum.rb</u> Implements the Ethereum provider strategy for OmniAuth

Looking for more resources? Check outour Developer's home.

Ruby community contributors {#ruby-community-contributors}

The <u>Ethereum Ruby Telegram group</u> is a host to a rapidly growing community and is the dedicated resource for discussions on any of the above projects and related topics.