

# ECL Code Documentation Generator Improvements

**The proposal period for 2022 internships is now closed**  
**The proposal period for 2023 internships will open in November 2022**

[This project is already taken for the 2022 intern program](#)

This project is a student work experience opportunity with HPCC Systems. Curious about other projects we are offering? Take a look at our [Ideas List](#).

Find out about the [HPCC Systems Summer Internship Program](#).

## Project Description

Make major improvements to the ECL Code Documentation Generator (ECLDoc), written in Python.

ECLDoc analyzes the ECL Code structure and produces documentation in HTML and PDF formats. The project requires analyzing the weaknesses of the current system, recommending improvements, implementing key improvements, testing, documentation, and producing a supportable github repository.

The successful candidate will develop Python programming skills, get some exposure to ECL, and gain perspective by taking a project from inception through production.

Completion of this project involves : TBC

**By the mid term review we would expect you to have:**

- TBC.

Mentor	Roger Dev <a href="#">Contact Details</a>  <b>Backup Mentor:</b> TBD <a href="#">Contact Details</a>
Skills needed	<ul style="list-style-type: none"><li>• Knowledge of ECL. Training manuals and online courses are available on the HPCC Systems website.</li><li>• Knowledge of distributed computing techniques</li></ul>
Deliverables	<ul style="list-style-type: none"><li>• Perform substantial transformation of the source data to create usable features</li><li>• Develop additional features through Shapelet Mining of the data series</li><li>• Apply Random Forest machine learning to classify cards as fraudulent or non-fraudulent.</li><li>• Test code demonstrating the correctness and performance of the algorithm.</li><li>• Supporting documentation.</li></ul>
Other resources	<ul style="list-style-type: none"><li>• <a href="#">HPCC Systems website</a></li><li>• JIRA issue for this project: TBC</li><li>• Learning <a href="#">ECL documentation</a> and <a href="#">on-line training courses</a>.</li><li>• <a href="#">Examples of existing code</a></li><li>• HPCC Systems <a href="#">Machine Learning documentation</a></li></ul>