

# ASDGenus Documentation

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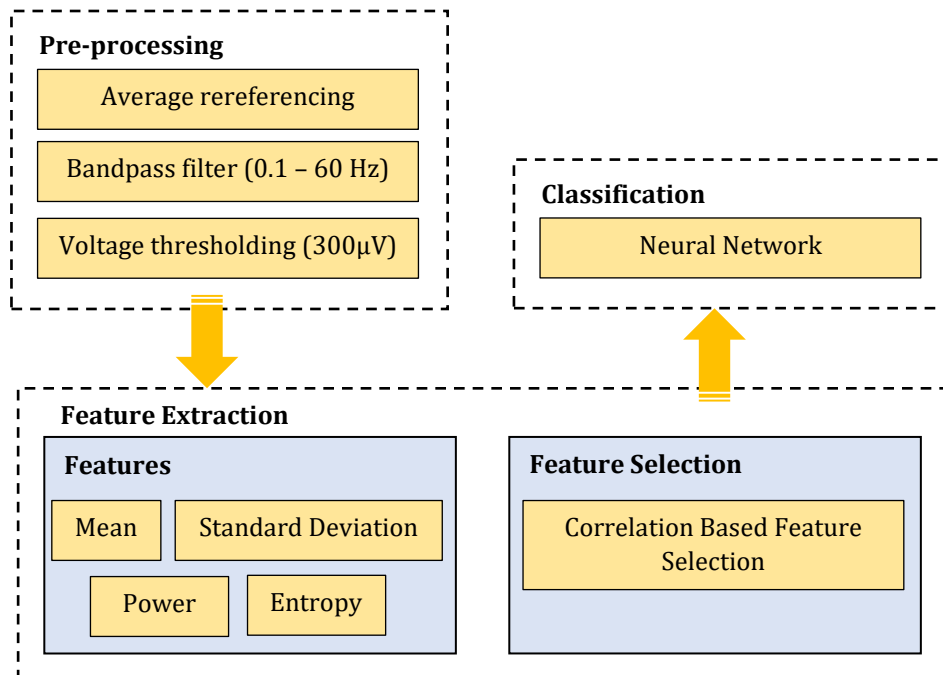
## 1 Target Audience

- Medical practitioners (doctors, EEG technicians, etc.)
- Researchers involved in Autism Spectrum Disorder (ASD) research

## 2 Supported EEG file type

In version 1.0, .vhdr extension is supported. Other EEG file extensions will be included in the coming updates.

## 3 System Architecture



## 4 System Output

The screenshot shows the ASDGenius software interface. The main window displays the "Autism Spectrum Disorder Prediction Result". The interface includes a sidebar with "Personal Details" (Name, Age, Gender) and "Import EEG File" (Choose a file, Choose). The main area shows the prediction result, including a large blue box labeled "Result" and a section for "Additional Details about the EEG signal" (Number of channels, Channel names, Duration, Recorded date). Red arrows point to the "Result" box and the "Additional Details" section, labeled "Primary system output" and "Secondary system output" respectively.

ASDGenius | Tool for Lives

Home Visualize Help

ASDGenius

Personal Details

Name:

Age:

Gender:

Import EEG File

Choose a file:

Choose

Predict ASD

Save Results

ASD Prediction Result

Autism Spectrum Disorder Prediction Result

Name:  Gender:

Age:  Date: Oct 7, 2019 2:34:00 PM

Result

Primary system output

Additional Details about the EEG signal:

Number of channels -

Channel names -

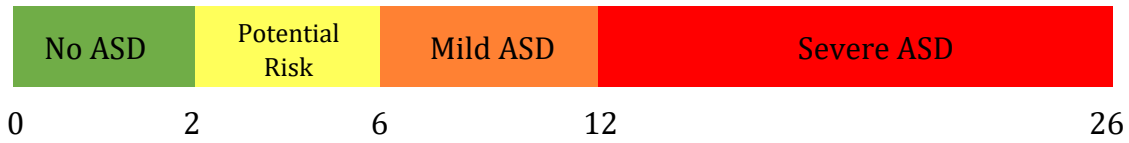
Duration -

Recorded date -

Secondary system output

The above report is generated based on the data you provided by choosing a .vhdr data file for the ASDGenius to predict ASD for the specific patient...

#### 4.1 Primary System Output



System outputs severity of ASD. The results are of four categories: No ASD (severity: 0-2), Potential risk for ASD (severity: 3 - 6), Mild ASD (severity: 7 - 12) and Severe ASD (severity: 13 - 26). The severity score is similar to that of ADOS-2 score.

#### 4.2 Secondary System Outputs

The report generated by the system, in addition to the primary output, includes:

- Number of channels
- Electrode locations
- Duration
- Record Date