



SCiCHART

CASE STUDY



Customer

Avicena Heart

Industry

Medical

Realtime Waveform Visualization of High Bandwidth, Multi-Series Cardiovascular Data for Medical Diagnostics.

Background

Avicenna is a medical device company developing an algorithm and new proprietary sensor platform, the Vivio, for extracting real time information about Cardiovascular function.

Through the Vivio, live, high-bandwidth, multi-series cardiovascular data is streamed directly to a mobile device via Bluetooth.

Their goal is to provide critical information to patients and physicians through their mobile app which is consumer friendly and makes health data clinically relevant.

Project Motivation & Goals

To outperform standard methods of Cardiovascular diagnosis.



Requirements

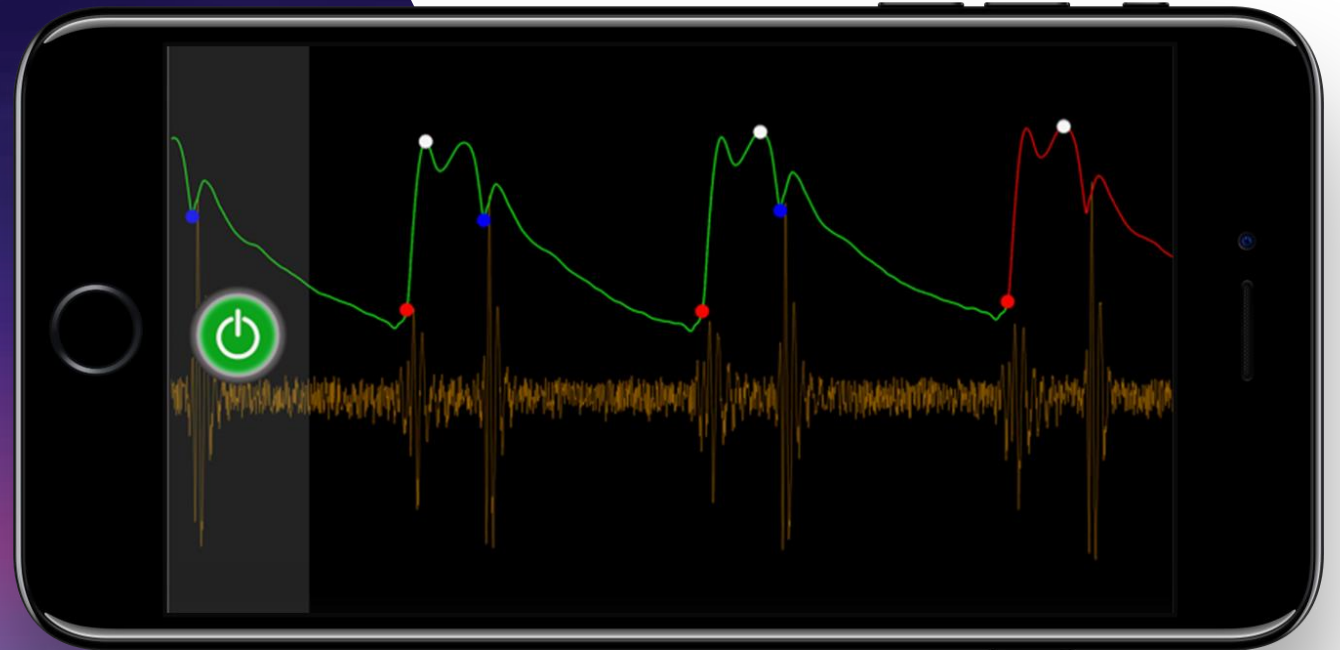
SciChart.iOS

- To display accurate Realtime Cardiovascular data streamed from the Vivio on mobile
- To handle high bandwidth multi series data streams simultaneously (total of 90 series)
- To allow for bespoke customization
- To maintain a smooth UI forming the centre piece of their application.

Drawbacks before SciChart

Avicena attempted to use other software to plot Waveforms in real time but found it deficient in many ways:

- Inability to handle multiple data streams
- Difficulty handling Realtime High bandwidth data
- Little to no customization
- Poor UI



Solution

High Performance Charting - SciCharts exceptional performance of large datasets can render over a million points in a line at interactive framerates handling their Realtime data streams easily.

Extremely Fast - Benefiting from the ultimate efficiency of native-code and GPU-acceleration with our High-Performance iOS charting Library, multiple data streams are easy to deal with, allowing Avicena to handle up to 90 series simultaneously.

Many Popular Chart Types - Including Lines, Band, OHLC, Heatmaps and ECG to name a few, our extensive Charting Library comes pre-packed with loads of charting solutions to serve all purposes.

Fully Customizable - Our Rich Chart Annotations API allows creating fully-interactive, customizable chart annotations as well as changing the appearance of the entire chart by tweaking our default styles through our Chart Modifiers API. With our easy to use highly customizable functionality, Avicena created the bespoke charts they needed.



Outstanding Performance with Real-time plotting of multiple series"

"Great Support!"

"SciChart was an ideal solution for the real-time plotting that is the centrepiece of our UI"

Sean Brady, Associate, Avicena LLC.

About SciChart

SciChart is a cross-platform WPF, iOS, Android and Xamarin Scientific & Financial Charting Library.

SciChart supports rendering of complex, interactive, real-time charts with many millions of data points for demanding scientific, medical and financial applications and embedded systems that require high performance, rich interaction and smooth updates.

Find out more about SciChart at <https://scichart.com>

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