

Data: Data frame input by user

Result: Interactive scatterplot matrix

/ Declare Shiny server*

```
server ← function(input, output, session){

  /* Declare Shiny output scatterplot matrix
  output$scatMatPlot ← renderPlotly({

    /* Draw hexagons and x=y line in bottom-left corner of matrix
    my_fn ← function(data, mapping){}

    /* Create static scatterplot matrix
    p ← ggpairs(data, lower = list(continuous = my_fn))

    /* Convert ggplot2::ggplot() object to plotly object
    ggP ← ggplotly(p)

    /* Tailor plotly scatterplot matrix interactivity with JavaScript

    ggPR ← ggP %>% onRender("function(el, x, data){

      /* If the user clicks on the plotly scatterplot matrix object

      el.on('plotly_click', function(e){

        /* Delete any old superimposed plotly geoms (orange dots)
        if (x.data.length > 0){Plotly.deleteTraces(el.id)}

        /* Determine gene IDs selected by user click. Save as object
        called selID with handle called 'selID' so it can be read
        outside current JavaScript function back in Shiny
        Shiny.onInputChange('selID', selID)

        /* Create traces for selected gene IDs as orange points that
        state gene names upon hovering
        trace = {mode: 'markers', color: 'orange', size: 6, text: selID,
          hoverinfo: 'text'}

        /* Superimpose traces onto the plotly scatterplot matrix object
        Plotly.addTraces(el.id, Traces)

      })

    })

    /* Pass the R data object into the JavaScript function
    ", data = data

  })

  /* Read into Shiny the gene IDs that user clicked on
  selID ← reactive(input$selID)

  /* Create data subset (read counts) for only the selected gene IDs
  pcpDat ← reactive(data[which(data$ID %>% selID()), ])

  /* Create static box plot of the full dataset
  BP ← ggplot(data) + geom_boxplot()

  /* Render boxplot interactive as a plotly object
  ggBP ← ggplotly(BP)

  /* Declare Shiny output boxplot
```