



Callsign®

# SMARTPHONE BEHAVIOUR ANALYSIS

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Matthew Marshall

# CALLSIGN ARE HIRING

[www.callsign.com/careers](http://www.callsign.com/careers)

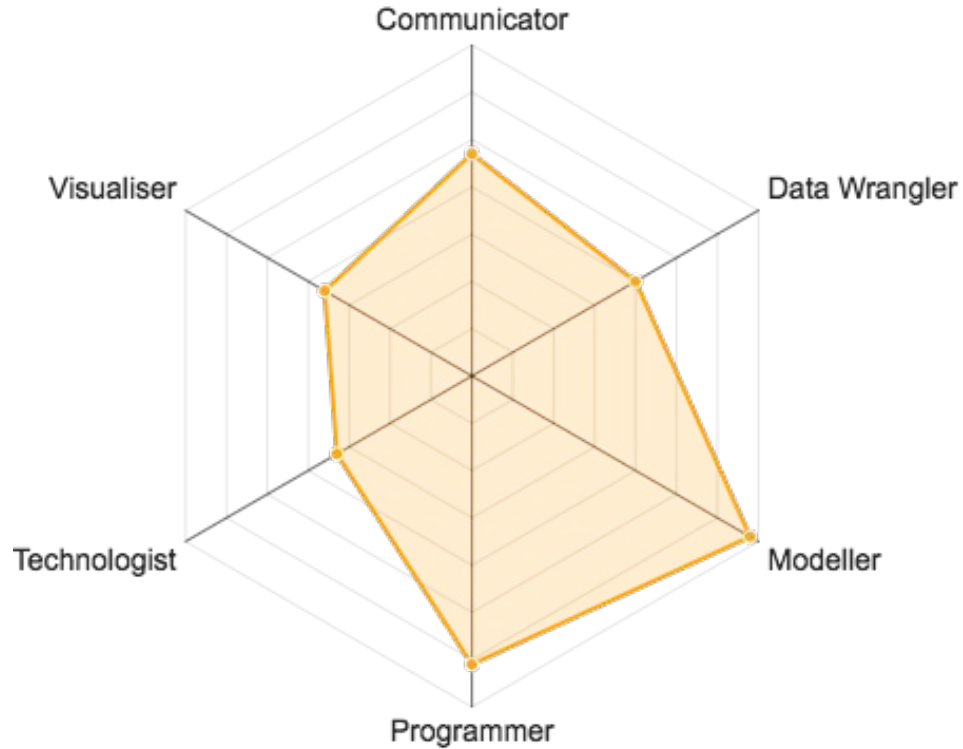
[\*\*recruitment@callsign.com\*\*](mailto:recruitment@callsign.com)

Callsign<sup>®</sup>

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# ABOUT ME

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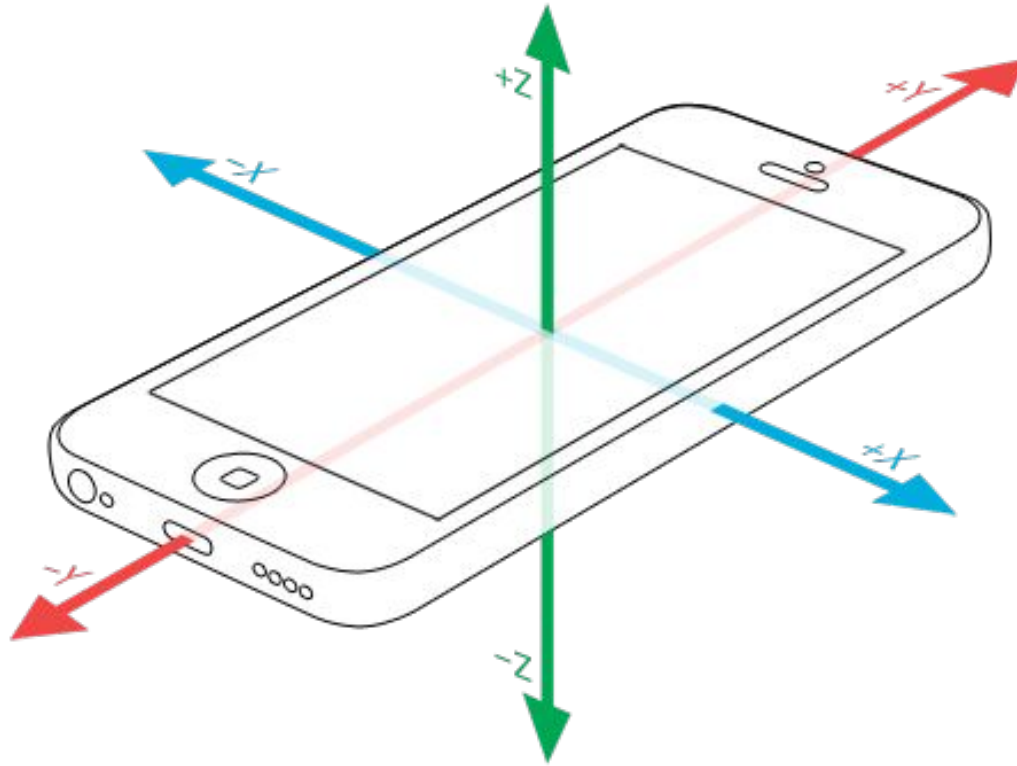


# THE CHALLENGE

How can we verify a person by the way they handle their phone?

# THE SENSORS

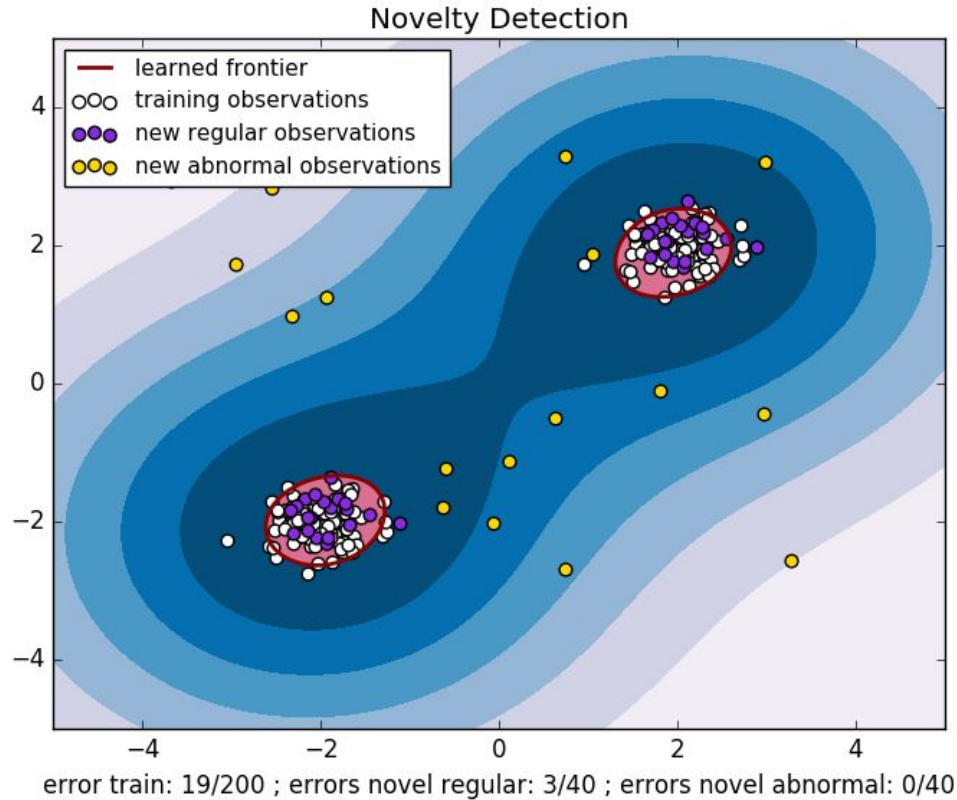
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# THE DATA



# THE ALGORITHM ONE-CLASS SVM



# FEATURE SELECTION





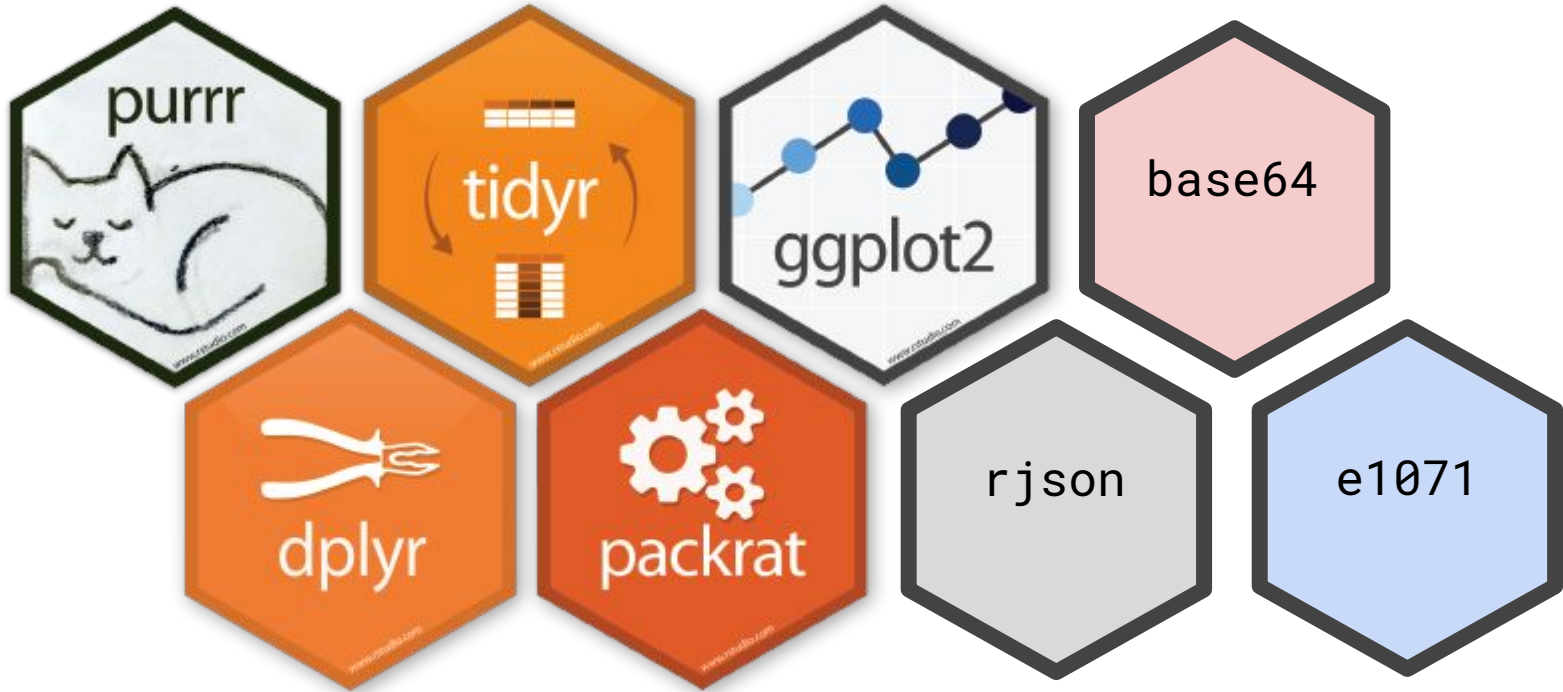
# PROJECT LIFECYCLE

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- Read papers for inspiration
- Work with app engineers to retrieve data from smart phone
- Collect data from multiple users to build model to prove concept
- Deploy R code to Rserve for immediate feedback and demos
  - Harden requirements for app data collection
    - App testing
    - Data gathering
    - Modelling
  - Translate R to Java and build into the platform
    - Deploy to Production!

# R PACKAGES

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# DEMO

<https://train-behaviour.callsign.com/>

<https://test-behavior.callsign.com/>

**WHAT'S NEXT?**

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