AuthentiKey: Keyboard Biometrics
Who we are

Team: Not Our (Seg)Fault

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Problem Description

Current biometric based MFA is clumsy
Current MFA

- Multifactor Authentication is widely used
- Biometrics is one approach to MFA
- The current state of biometric based MFA is lacking
Problem Solution

Keyboards: ubiquitous and easy
Proposed Solution to MFA

Keyboard Biometrics are **Lightweight**
No need for extra device or interface

Keyboard Biometrics are **Unique**
No sacrifice is made in switching to keyboard based biometrics
It's Demo Time
System Description
Verification and Log-In Integration
Core Features & Functionality

User Training

Users sign up by typing a phrase multiple times
Core Features & Functionality

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User Validation
When logging in, users are prompted to type that same phrase, which is validated against past data
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User Updating
Users' data can be updated to account for changing typing style
System Overview

User ➔ KewlCatPhotos.biz ➔ Authentikey Backend Server ➔ Data Storage
System Security

- Secure communication channel (i.e. no replay attacks)
- Data storage is secure against attack
- API keys for clients
Results & Conclusion

Overall effectiveness and project findings
Data Collection

- Public-facing form for data collection
- People typed a sentence four times to train
- Used automated testing script for statistics and validation
100+ Users Trained

96% True Positive Rate

5% False Positive Rate
In **Conclusion**

- Multifactor Authentication is widely used
- Current biometric solutions to MFA are a bit lacking
- AuthentiKey provides a robust and easy solution
- System Security is still maintained
Thanks!
Any questions?