AuthentiKey: Keyboard Biometrics
Who we are

Team: Not Our (Seg)Fault

Members: Alex Wein, Clara Frausto, Ashlynn Cardoso, William Bennett, Caitlin Scarberry
Mentors: Alec Harrell, Renato Untalan
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
System Description

Verification and Log-In Integration
How it all works:
Main Features & Functionality

User Training
Users create their template by typing a phrase multiple times

User Validation
When logging in, users are prompted to type a short sentence, which is validated against past data

User Updating
Users templates can be updated to account for changing typing style
It’s Demo Time
Demo Of AuthentiKey
Design Practices

Workflow and Coordination
Workflow Management

- Slack for communication
- Meister Task for Task Management
- Google Sheets for burndown
- Google Docs and ShareLaTeX for collaborative document editing
Communication & Coordination

- We communicate regularly over Slack with our mentors
- We meet twice a week in person usually
- The office has a dog

aharrell 4:05 PM
In office or over phone call today?

Ashlynn 4:05 PM
in office

Alex Wein 4:05 PM
But only if the dog is there

renato 4:05 PM
lol

aharrell 4:06 PM
👍 haha she might b there
Conclusion
Where we are & where we’re going
AuthentiKey

Progress

Initial Design: Login/Registration flow is implemented

Machine Learning: Machine Learning Backend is fleshed out

Full Security: AuthentiKey stores data securely

Portable to Any Interface: AuthentiKey is agnostic of the interface and can be used in any context.
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?