

Secure voice based authentication for mobile devices: Vaulted Voice Verification

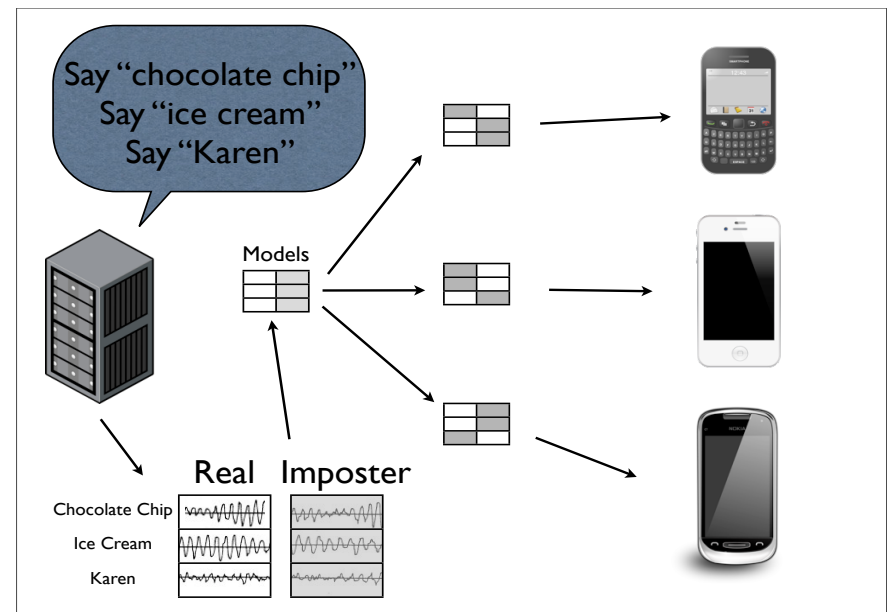
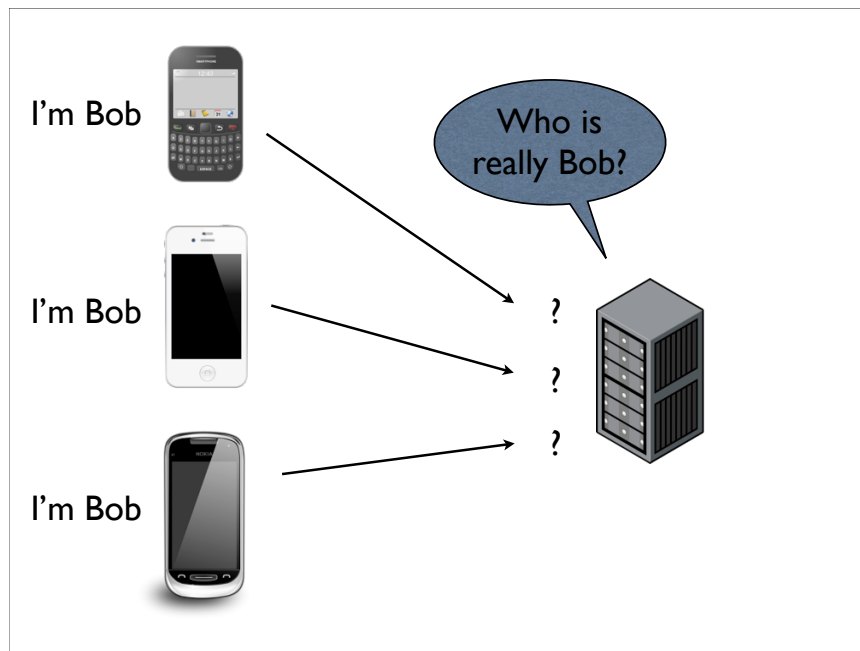
R.C. Johnson and Terrance E. Boulton
University of Colorado, Colorado Springs, CO
Walter J. Scheirer
Harvard University, Cambridge, MA



The Question

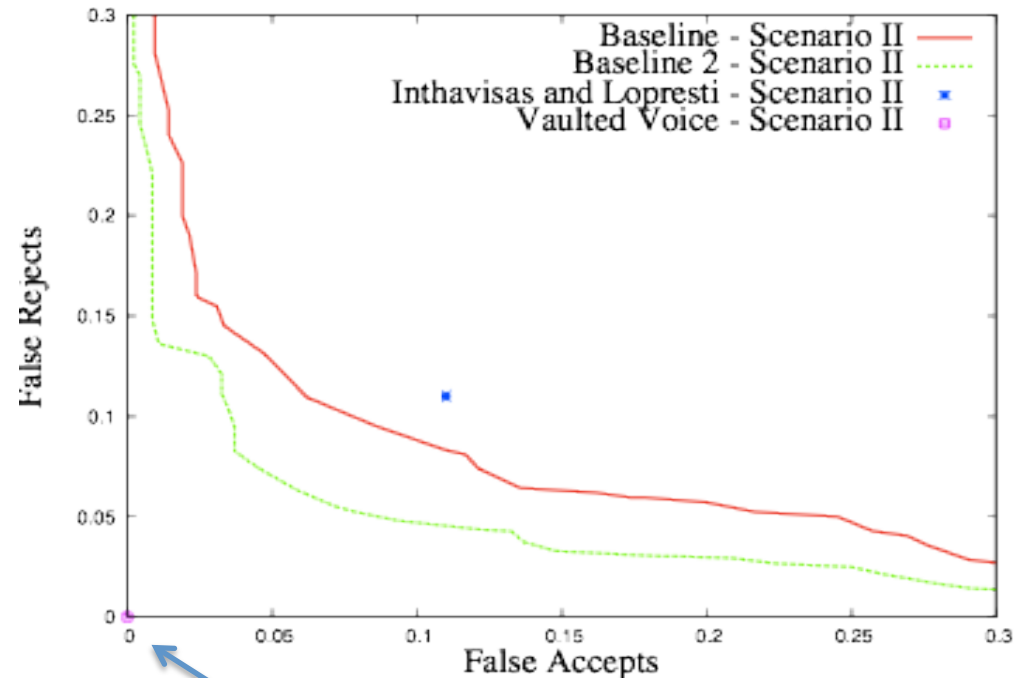
How can you use a mobile device to prove who you are securely and remotely while still preserving your privacy?

Vaulted Voice Verification's novel challenge-response protocol.



VVV Results

- MIT Dataset¹
 - 48 speakers
 - 22 female
 - 26 male
 - Different environments
 - office
 - lobby
 - intersection
 - Words and phrases
 - ice cream flavors
 - names of people
 - etc...
 - 5,184 Speech Samples
 - 54 speech samples per user per session
 - 3 sessions each user



VVV Results

¹Alex Park Ram H. Woo and Timothy J. Hazen. The MIT mobile device speaker verification corpus: Data collection and preliminary experiments. IEEE Odyssey - The Speaker and Language Recognition Workshop, 2006.

