## Conclusion

- The area of interactive machine learning, or contextual bandits encompasses applications in mobile health, news recommendation, and advertising
- Contextual bandits enable deeper personalization
  - The set of possible interventions can be enlarged, thus improving their efficacy
  - It takes advantage of already logged data for system optimization without the need for a user model
- Contextual bandits methodology provides excellent and impactful opportunities for innovative and highly personalized mHealth interventions

Microsoft Research Blog Dec 2017; Lei et al., 2017