Project Motivation:
Correct posture is the key to good health.

From 2001 through 2004, 35.4% of US adults aged 40 years and older (69 million Americans) had balance impairment.

Adults with abnormal balance who reported dizziness had a 12-fold increase in the odds of falling.

Smart Shoes are the Solution:
• Designed to keep you safe.
• Can help you correct your posture.
• Can also measure your everyday activity.

How It Works:
Motion sensors embedded in the shoes are used to capture gait data which is sent over to a smart phone using a Bluetooth link. This data is then post processed to analyze gait characteristics.

Bonus Features:
Streaming gait data can be used in virtual reality and fitness applications.

Try It:
Check out the live data stream being displayed from our smart shoes.

Advantages:
• Healthcare specialists can monitor patient’s progress remotely.
• Can detect a medical emergency such as a fall and call 911.
• Improves your posture by giving you real time feedback, silently.
• Can potentially work with any pair of shoes.

Future Work:
We are working to create Smart Shoes as a platform for healthcare, fitness and virtual reality applications!

Mihir Shete – Computer Science, MS
Tushar Verma – Computer Engineering and Computer Science, BS