Adding a contact to a smartphone from a business card should be as easy as taking a picture.

Smartphones today have:
- High computation power
- High-resolution camera
- Android platform to develop apps (and link with external libraries)

**Motivation**

**Results**

**System Pipeline**

1. **Capture Image**
2. **Downsize Input**
3. **Find Edges**
4. **Find Edges Intersections** (with some criteria)
5. **Find the Largest Quadrilateral** (with other criteria)
6. **Find Homography and Warp Full-resolution Image**
7. **Find Grayscale Neighborhood Variance**
8. **OCR (Tesseract)**
   - Binarize (using adaptive Otsu, avoiding low variance regions)
   - Text Locations (bounding box of high variance regions)
9. **Android Contacts**
10. **Android Screenshots**

**Case 1**: Card is darker than the background

**Case 2**: Card is held in hand and of similar color to the background

**Case 3**: Strong reflections on the card

**Note**: No phone number provided on card