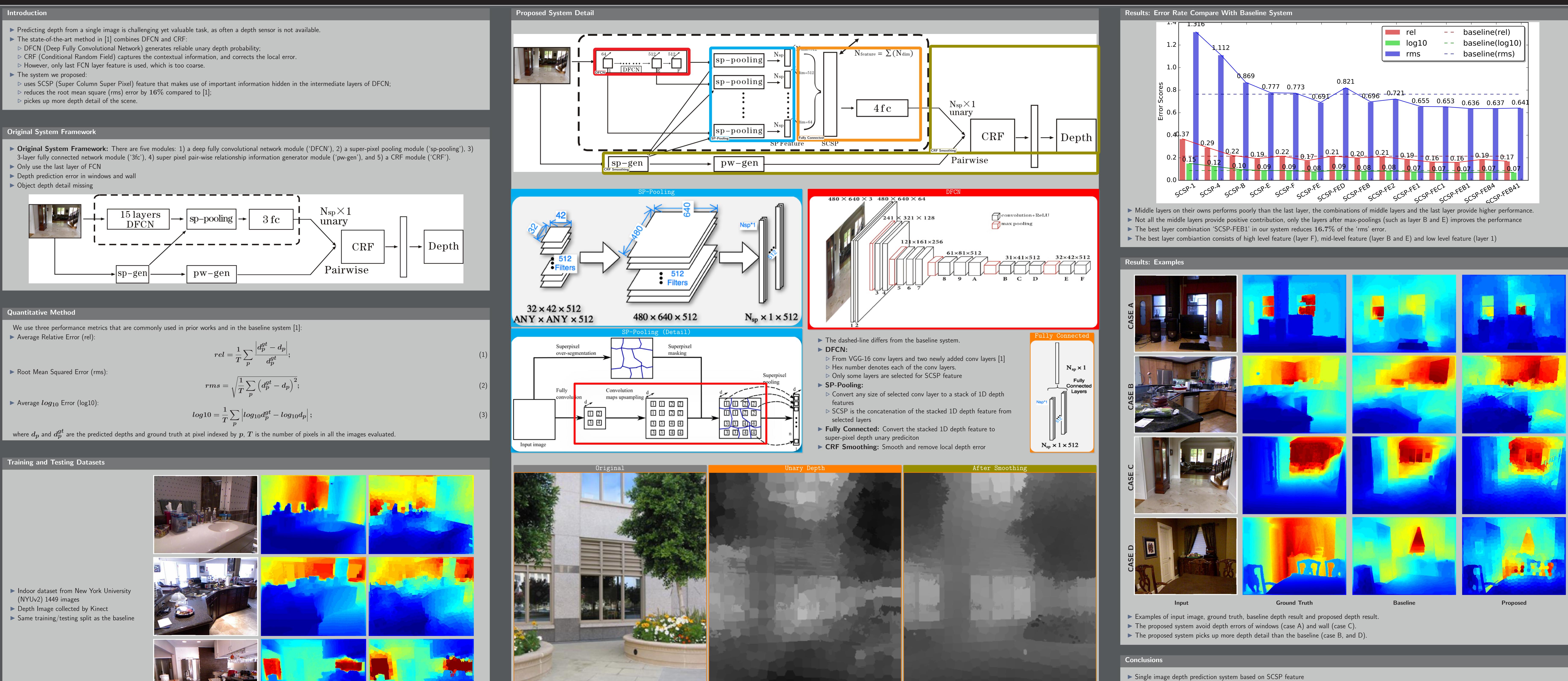
## Introduction

- Predicting depth from a single image is challenging yet valuable task, as often a depth sensor is not available.
- The state-of-the-art method in [1] combines DFCN and CRF:

- ▷ However, only last FCN layer feature is used, which is too coarse.
- The system we proposed:

### Original System Framework



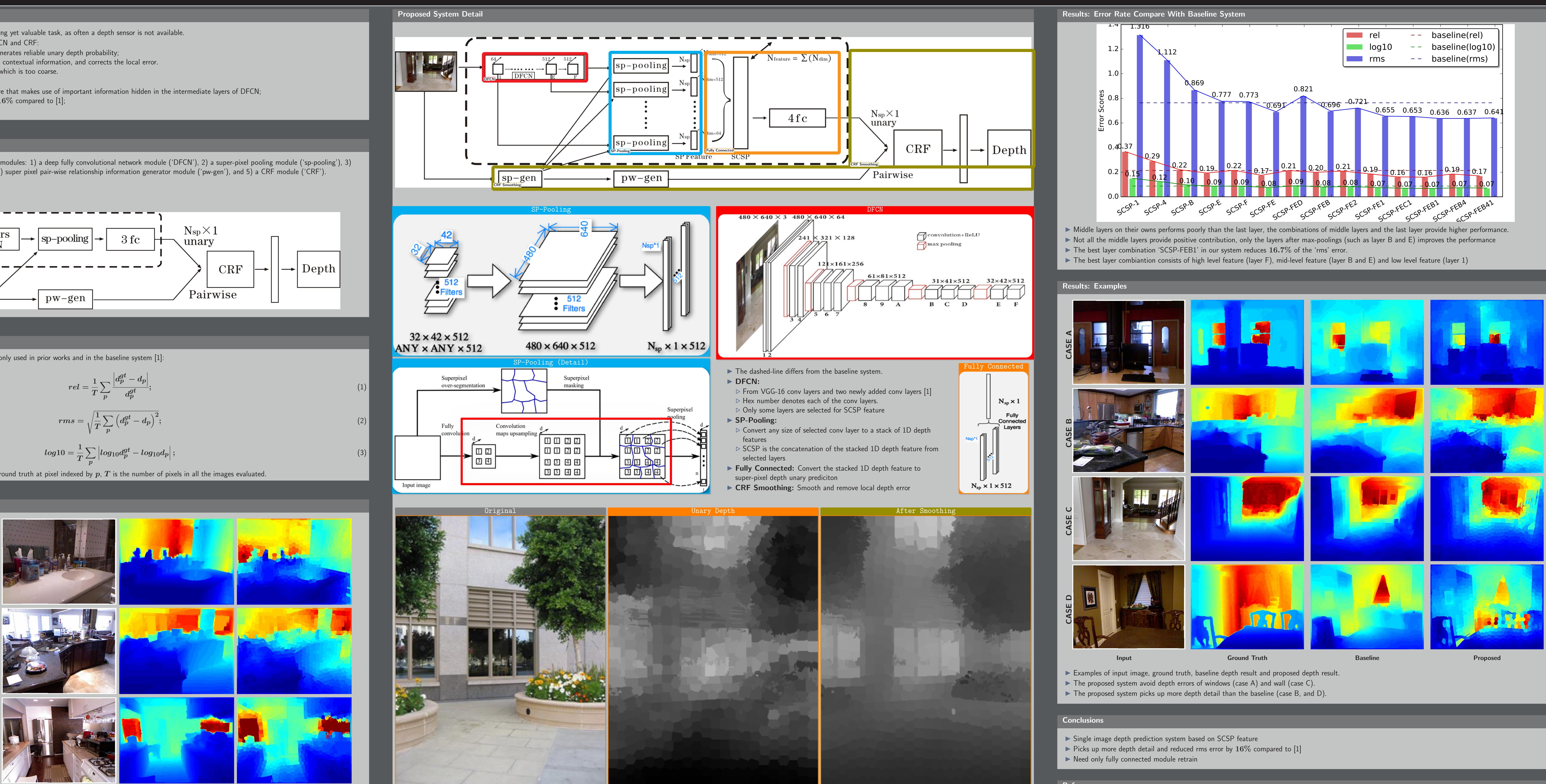
### Quantitative Method

We use three performance metrics that are commonly used in prior works and in the baseline system [1]:

- Root Mean Squared Error (rms):
- ► Average  $log_{10}$  Error (log10):

$$rel = rac{1}{T} \sum_p rac{\left| d_p^{gt} - d_p 
ight|}{d_p^{gt}};$$
 $rms = \sqrt{rac{1}{T} \sum_p \left( d_p^{gt} - d_p 
ight)^2};$ 

$$log10 = rac{1}{T} \sum_{p} \left| log_{10} d_p^{gt} - log_{10} d_p \right|;$$



- (NYUv2) 1449 images

GroudTruth

# SINGLE IMAGE DEPTH PREDICTION USING SUPER-COLUMN SUPER-PIXEL FEATURES Xufeng Guo, Kien Nguyen, Simon Denman, Clinton Fookes, Sridha Sridharan Email: {felix.guo, k.nguyenthanh, s.denman, c.fookes, s.sridharan}@qut.edu.au

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Proposed System

- Deference erences

