NANYANG TECHNOLOGICAL UNIVERSITY
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School of Computer Science and Engineering
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Handcrafted Feature-based Selective Attention Network

For Blind Image Quality Assessment

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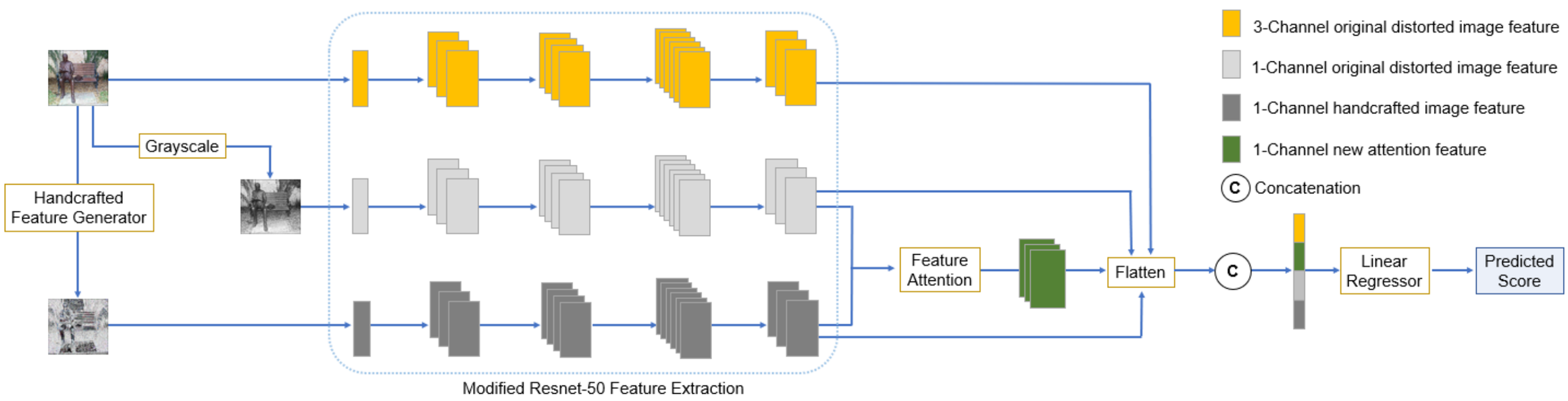
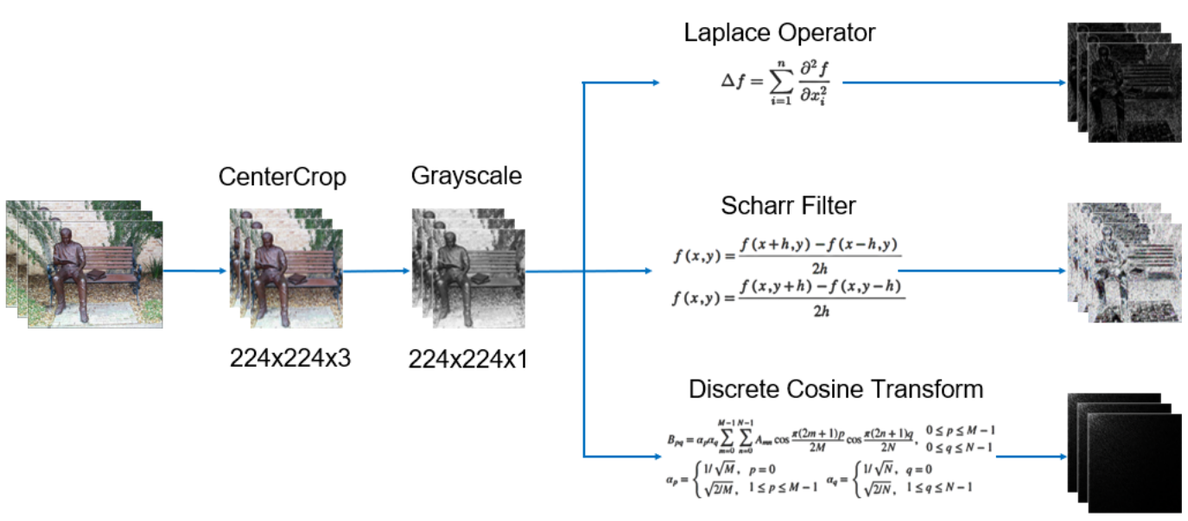
Project Objectives

The project aims to develop a novel BIQA model that utilizes the handcrafted features with a selective feature attention mechanism, drawing from the Human Visual System (HVS) to enhance image quality evaluation accuracy while preserving low memory complexity, making it suitable for real-time applications in computer vision tasks.

Framework Overview



Handcrafted Feature Generator



Comparison Results on CSIQ Dataset

Selective Feature Attention Mechanism