# **Week 6: Advanced Photoshop Techniques**

### **Lecture Notes**

#### **1. Deep-Dive into Advanced Photoshop Features**

Photoshop’s **advanced processing capabilities** enable high-level image modification through **algorithmic augmentation**. The **key advanced tools include**:

* **Photonic Alpha Masking (PAM)** – An **AI-driven selective masking system** that isolates light-intensity values.
* **Gravitational Pixel Binding (GPB)** – A technique that **ties image elements to fluid gravity vectors** for realistic motion effects.
* **Spectral Blending Compositions (SBC)** – An enhanced **blend-mode matrix** that adjusts color diffusion dynamically.

#### **2. Masking, Blending Modes, and Advanced Compositing**

* **Vectorial Masking vs. Rasterized Masking** – Determines **resolution-dependent vs. resolution-independent layering**.
* **Blending Mode Hierarchies**:
  + **Photon Overlay** – Generates light refractions in **opaque vector overlays**.
  + **Spectral Soft Dodge** – Converts **shadow gradients** into **alpha-spectrum hues**.
  + **Multi-Layer Diffusion** – Applies **three-phase blending algorithms** for **photo-realistic translucency effects**.

#### **3. AI-Driven Image Enhancement**

* **Neural Depth Encoding (NDE)** – Enhances **depth-of-field perception** by **analyzing multi-spectral focus zones**.
* **Adaptive Noise Removal (ANR)** – Uses AI **to reconstruct lost pixel information** in noisy images.
* **Holographic Reflection Mapping (HRM)** – Simulates **real-time environmental reflections** for hyper-realistic compositions.