Publication and	Technology	Summary
Year		
TSAI, R. (1984)	Multiframe image restoration and registration	Applied and evaluated the ScSR method for improvement of image quality of magnified MR images (T1-weighted, T2-weighted, FLAIR, and DWI images) in16-bit DICOM format
Tom and Katsaggelos (1996)	Reconstruction of a high-resolution image by simultaneous registration, restoration, and interpolation of low-resolution images	Solution is provided to the problem of obtain- ing a high resolution image from several low resolution images that have been subsampled and displaced by dif- ferent amounts of sub- pixel shifts
Welsh, T., Ashikhmin, M., and Mueller, K. (2002)	Transferring color to greyscale images	Introduced a general technique for colorizing greyscale images by transferring color between a source, color image and a destination, greyscale image
Levin, A., Lischinski, D., and Weiss, Y. (2004)	Colorization using optimization	Used quadratic cost function and were able to generate high quality colorizations.

Yatziv, L. and Sapiro,	Fast image and video	High Quality col-
G. (2006)	colorization using	orization results are
	chrominance blending	obtsined at a fraction
		of the complexity
		and computational
		cost using concepts of
		luminance-weighted
		chrominance blend-
		ing and fast intrinsic
		distance computations
Qu, Y., Wong, TT.,	Manga colorization	Proposed a novel
and Heng, PA. (2006)		colorization technique
		that propagates color
		over regions exhibiting
		pattern-continuity
		as well as intensity-
		continuity
Tola, E., Lepetit, V.,	A fast local descriptor	Introduced a novel
and Fua, P. (2008)	for dense matching	local image descriptor
		designed for dense
		wide-baseline match-
		ing purposes
Goodfellow, I. J.,	Generative Adversarial	Proposed a novel ap-
Pouget-Abadie, J.,	Networks	proach of implement-
Mirza, M., Xu, B.,		ing Generative Adver-
Warde-Farley, D.,		sarial Networks using
Ozair, S., Courville,		two Neural Networks,
A., and Bengio, Y.		viz Generator and Dis-
(2014)		criminator Networks.

Mirza, M. and Osin-	Conditional generative	Introduced the con-
dero, S. (2014)	adversarial nets	ditional version of
		generative adversarial
		nets, which can be
		constructed by simply
		feeding the data, y,
		to condition on to
		both the generator and
		discriminator
He, K., Zhang, X.,	Deep residual learning	Presented 152 layer
Ren, S., and Sun, J.	for image recognition	using residual learning
(2015)		framework for image
		recognition and an
		adaptive edge detec-
		tion based colorization
		algorithm and its
		applications.
Long, J., Shelhamer,	Fully convolutional	Showed that convo-
E., and Darrell, T.	networks for semantic	lutional networks by
(2015)	segmentation	themselves, trained
		end-to-end, pixels-
		to-pixels, improve
		on the previous best
		result in semantic
		segmentation.
Simonyan, K. and Zis-	Very deep convolu-	Investigated the effect
serman, A. (2015)	tional networks for	of the convolutional
	large-scale image	network depth on its
	recognition	accuracy in the large-
		scale image recognition
	D. G.L.	setting
Cheng, Z., Yang, Q.,	Deep Colorization	The paper presented
and Sheng, B. (2016)		a fully-automatic col-
		orization method using
		deep neural networks

Dahl, R. (2016)  Radford, A., Metz, L., and Chintala, S. (2016)	Automatic Colorization  Unsupervised representation learning with deep convolutional generative adversarial networks	automatically produce multiple colorized versions of a grayscale image  Introduced a class of CNNs called deep convolutional generative adversarial networks (DCGANs), that have certain architectural constraints, and demonstrate that they are a strong candi-
Ledig, C., Theis, L.,	Super Poselution using	date for unsupervised learning
Huszar, F., Caballero, J., Cunningham, A., Acosta, A., Aitken, A., Tejani, A., Totz, J., Wang, Z., and Shi, W. (2017)	Super Resolution using GAN	Photorealistic single image super-resolution using a generative adversarial network.
Isola, P., Zhu, JY., Zhou, T., and Efros, A. A. (2018)	Image-to-image translation with conditional adversarial networks	Pix2Pix is a Conditional-GAN with images as the conditions for coloriza- tion.

Zhu, J	Generative visual ma-	Defined a class of im-
Y.,Krähenbühl, P.,	nipulation on the nat-	age editing operations
Shechtman, E., and	ural image manifold	,after learning natural
Efros, A. A. (2018)		image manifold from
		data using generative
		adverserial neural net-
		works, and constrain
		their output to lie on
		that learned manifold
		at all times