The functional of (Dirac) harmonic maps as a special class of gauge theories

Harmonic maps are known to generalize geodesics on a Riemannian manifold and play a basic role in the theory of minimal surfaces. They are also intimately related to the moduli space of Riemannian surfaces. I'll discuss how the geometrical set up of (Dirac) harmonic maps fits with "Dirac type gauge theories". The latter allows to describe, for instance, Einstein's theory of gravity, Yang-Mills gauge theory and spontaneously broken Yang-Mills gauge theories in a unified geometrical frame. In particular, I'll discuss how the functional underpinning (Dirac) harmonic maps follows from a certain class of Dirac operators and thereby fits with the above mentioned gauge theories.