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Sommario/riassunto	This thesis discusses the random Euclidean bipartite matching problem, i.e., the matching problem between two different sets of points randomly generated on the Euclidean domain. The presence of both randomness and Euclidean constraints makes the study of the average properties of the solution highly relevant. The thesis reviews a number of known results about both matching problems and Euclidean matching problems. It then goes on to provide a complete and general solution for the one dimensional problem in the case of convex cost functionals and, moreover, discusses a potential approach to the average optimal matching cost and its finite size corrections in the quadratic case. The correlation functions of the optimal matching map in the thermodynamical limit are also analyzed. Lastly, using a functional approach, the thesis puts forward a general recipe for the

computation of the correlation function of the optimal matching in any dimension and in a generic domain. iv>.