A bar framework, denoted by $G(p)$, is a finite collection on $n$ points: $p^1, p^2, \ldots, p^n$ in $\mathbb{R}^k$ together with a graph $G$ on $n$ vertices, such that the points corresponding to adjacent vertices of $G$ are constrained to stay the same distance apart. There are three notions of bar rigidity namely, rigidity, infinitesimal rigidity and static rigidity. The well-known rigidity matrix plays a critical role in all these notions. In this talk I’ll discuss the relationships among these three notions and I’ll introduce a new “dual” rigidity matrix. The relationship between this new matrix and the rigidity matrix will also be discussed.