Principal Components Analysis Notes

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1 Background

Principal Componnents Analysis (PCA) goes all the way back to Harold Hotelling in the 1933 when the cutting edge topics in statistics at the time were the multivariate methods we know today. It was first introduced as a technique for obtaining a smaller set of orthogonal linear projections of a single collection of correlated variables where the projections are ordered by decreasing variance. Note that it is also called the *Karhunen-Loève transform* in communications theory and *empirical orthogonal functions* in atomspheric science.

2 References