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For a form f of degree d in n -variables, there is an algebra called the Clifford algebra C_f which is universal for linearizing f in matrices. The matrix representations of C_f are in bijection with certain vector bundles (called Ulrich bundles) on closely related hypersurfaces. We discuss recent results in case of Ulrich bundles on cubic and quartic surfaces (which correspond to ternary forms of degree 3 and 4). We also show how noncommutative algebras are used in providing nontrivial examples of smooth ACM curves on some hypersurfaces of higher dimension. This is joint work with Yusuf Mustopa (and partly with Emre Coskun). (Received August 28, 2012)