abstract Gamma-ray bursts provide what is probably one of the messiest of all astrophysical data sets. Burst class properties are indistinct, as overlapping characteristics of individual bursts are convolved with effects of instrumental and sampling biases. Despite these complexities, data mining techniques have allowed new insights to be made about gamma-ray burst data. We demonstrate how data mining techniques have simultaneously allowed us to learn about gamma-ray burst detectors and data collection, cosmological effects in burst data, and properties of burst subclasses. We discuss the exciting future of this field, and the web-based tool we are developing (with support from the NASA AISR Program). We invite others to join us in AI-guided gamma-ray burst classification (http://grb.mnsu.edu/grb/).