The advertising industry is undergoing tremendous change as the increasing availability and use of data drives processes towards more automation and efficiency. Mediaocean, being the leading platform for media buying across the industry, is at the vanguard of many of these changes. We use data-driven quantitative research to surface interesting new insights to both buyers and sellers of media, leading to better price discovery in the marketplace. The technologies used in these initiatives include real-time data processing, data mining and machine learning, statistical analysis and visualization, and user-friendly, mobile interface development. We will discuss our ongoing research initiatives, as well as the internship program that we have in these areas – in particular, how we’re studying the usage patterns of the advertising buyer and seller to further our understanding of the industry and modernize how they interact.