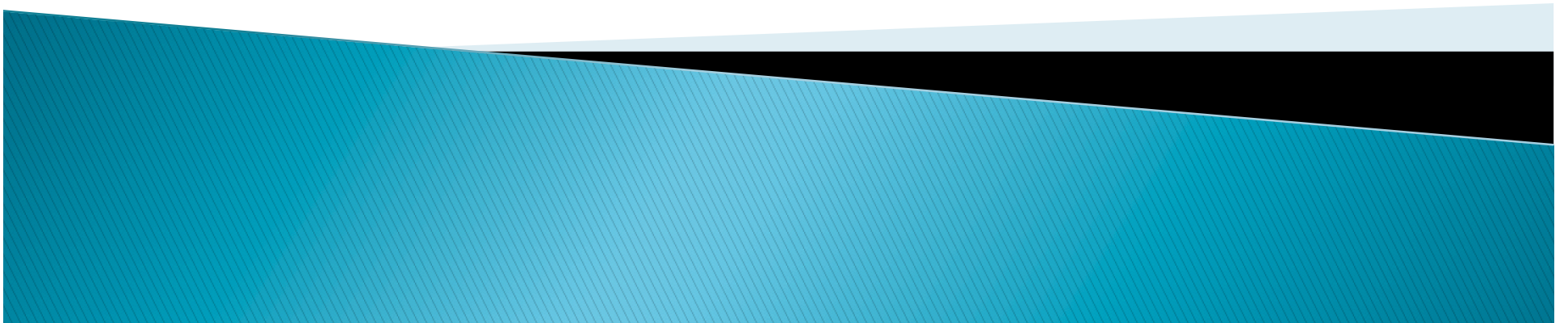


What Data Science Skills Do Our Students Need? Let's Ask Them!

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Let's ask...

- ▶ Students who took my multivariate data analysis course (Fall 2009 or Fall 2012)
 - With no prior statistics courses and who took no further statistics courses (from our department)
 - Asked what topics from the course they'd seen elsewhere; how taking the course had impacted them
- ▶ The course covered multivariate techniques and their applications without delving deeply into the underlying linear algebra.
- ▶ Students undertook course projects where they had to employ at least 2 techniques we'd covered.
- ▶ The R software was used.
- ▶ We now teach the course with a pre-req of intro stats.



Selected Student Responses

- ▶ Two are consultants; one is a research associate
- ▶ First consultant
 - “Most relevant for my current job is methods of data visualization for large data sets.”
 - The course was useful for interviews.
- ▶ Second consultant
 - “In my job as a consultant I've used clustering, classification and factor analysis.”
 - Having experience computing has been very useful.
- ▶ Research associate
 - Has seen lots of Principal components analysis
 - “Learning a statistical program/language relatively early in my college career was particularly valuable for the work I do now”



Summary

- ▶ Many possibilities lie before us
 - ▶ Wide-range of topics to decide to cover or not
 - ▶ Computing knowledge is certainly increasing in importance.
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- ▶ What would your students say?

