
Math 389L
Problem Set 6
Tuesday, April 2, 2019

Note: You'll want to read Chapter 2 of Vershynin, especially Section 2.4, before answering these problems.

Vershynin 2.4.2 Consider the random graph $G \sim G(n,p)$ with expected degrees $d \leq C \log n$ for some constant $C \geq 1$. Show that with high probability (say 0.9), all the vertices of G have degree $\mathcal{O}(\log n)$.

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Vershynin 2.4.3 Consider the random graph $G \sim G(n,p)$ with expected degrees $d \leq C$ for some constant $C > 1$. Show that with high probability (say 0.9), all the vertices of G have degree $\mathcal{O}(\frac{\log n}{\log \log n})$.

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