<http://matt-welsh.blogspot.com/2012/12/how-to-get-faculty-job-part-1.html>

<https://www.vpul.upenn.edu/careerservices/writtenmaterials/researchstatements.php>

**Research statement**

My research interests are distributed systems, computer networks, software system design, and machine learning.

My research started with web service design and analysis during my dissertation project at computer science department of University of Georgia.

When I joined AT&T labs from 2005, my research is computer network, specifically IPTV metro network planning, applying graph algorithm to metro area network planning that leads to patent 1, and algorithms to detect communication link discontinuity, which leads to patent 2.

After that, my research goes to access network telecom network analysis, large scale data system for network data analysis, machine learning for network operation insights.

Tips:

Key --- show the search committee that your research is moving forward and you are moving forward along with it in terms of developing new skills and knowledge.

Basically you write about the following : the more clearly you can articulate the path of your research has taken, where it takes you in the future, the more convincing and interesting it will be read.

What got you interested in this research

The burning question you set to answer

What challenges you encounter along the way and how you overcome them?

How you research can be applied

Why is your research important within the field

Future direction, and new questions do yo have?

<<todo>>

narrative summary of your research contributions (and especially how they all tie together), and what areas you intend to work on in the future. It's usually about 3-4 pages long and needs to nail what your specific research "angle" is, why the area is important, what your track record is, and what your research vision is going forward.

They want to see that you have an independent and compelling vision for at least the first few years of your faculty job. If the best you can come up with is a couple of papers' worth of extensions to your thesis, you're in trouble. Try to think of a three-to-five year agenda that would get people excited to have you part of the faculty.