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# Notation

Meaning	Notation
Single query	$q$
Single document	$d$
Set of queries	$Q$
Collection of documents	$D$
Term in query $q$	$t_q$
Term in document $d$	$t_d$
Full vocabulary of all terms	$T$
Set of ranked results retrieved for query $q$	$R_q$
Result tuple (document $d$ at rank $i$ )	$\langle i, d \rangle$ , where $\langle i, d \rangle \in R_q$
Relevance label of document $d$ for query $q$	$rel_q(d)$
$d_i$ is more relevant than $d_j$ for query $q$	$rel_q(d_i) > rel_q(d_j)$ , or $d_i \succ_q d_j$
Frequency of term $t$ in document $d$	$tf(t, d)$
Number of documents that contain term $t$	$df(t)$
Vector representation of text $z$	$\vec{z}$
Probability function for an event $\mathcal{E}$	$p(\mathcal{E})$
$\mathbb{R}$	The set of real numbers

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