What makes these 3 different? eigenvalue

Why this? and not this?

eigenvalues

test docs. eigen vector

sibilance: 7kHz

How to kill hissing? eigenvalue

Have Netflix ratings

<table>
<thead>
<tr>
<th>movies →</th>
</tr>
</thead>
<tbody>
<tr>
<td>users</td>
</tr>
</tbody>
</table>

identify movie genres

eigenvector
eigenvalue:

\( \lambda \) is an eigenvalue of \( A \) for eigenvector \( \mathbf{v} \) if
\( A \mathbf{v} = \lambda \mathbf{v} \) trivial if \( \mathbf{v} \neq 0 \)

\( (A - \lambda I) \mathbf{v} = 0 \)

\( \lambda \) is an eigenvector of \( A \)
\( \iff \)
\( (A - \lambda I) \) is not of full rank

1) Write a system of equations
\( (A - \lambda I) \mathbf{v} = 0 \)
Solve for \( \mathbf{v} \)

2) Magic function \( \det \)
\( \det(A - \lambda I) = 0 \)