How to Write an Effective Fellow Nomination

Updated August 2018
Who is eligible to be a Fellow?

At the time the nomination is submitted, a nominee must:

• have accomplishments that have contributed importantly to the advancement or application of engineering, science and technology, bringing the realization of significant value to society;

• hold IEEE Senior Member or IEEE Life Senior Member grade;

• have been a member in good standing in any grade for a period of five years or more preceding 1 January of the year of elevation.
Review Process

The process consists of two evaluations:

• the IEEE Society/Technical Council that the nominator identified on the nomination form
• IEEE Fellow Committee - only this committee reviews the reference letters.
Nominator → Nomination Form → References → Reference Forms → Fellow Committee Judges

Endorsers → Endorsement Forms → Rank → S/TC-FEC → Score → Narrative

Fellow Committee Judges:
- Professional Activities: 10
- Strength of support of References: 15
- Strength of support of S/TC: 25
- Technical accomplishments: 40

Before March 1

April 15 - June 15

July 1 - September 1
Evaluation criteria:

• The nominee’s *contribution* to the field.
• The *evidence* provided that documents this contribution
• The *impact* the contribution has had on the field.
Individual Contributions

– Identify the category in which the nominee has made significant contributions that would qualify him/her for Fellow grade from the following:

- Application Engineer/Practitioner
- Educator
- Research Engineer/Scientist
- Technical Leader
Individual Contributions

- Describe your relationship to the nominee and how you, PERSONALLY became aware of the importance of his/her extraordinary accomplishments and their impact on society.
  - Colleague
  - Committee member
  - Familiar with technical work
Individual Contributions

Explain how the nominee's one or two most distinctive contributions have contributed to the advancement or application of engineering, science, and technology.

Explain how these contributions of unusual distinction have had a lasting impact on society. Identify specific attributes of the nominee's contributions that qualify him/her for elevation to Fellow, and why the nominee ranks near the top of those in his/her discipline.
Application Engineer

• What product development, advancement in systems, application or operation, project management or construction activity, process development, manufacturing innovation, codes or standards development, or other application of technology was the direct result of the nominee's personal effort?

• Describe the innovation, creativity, and importance of the development, advancement or application of technology.

• List the most important tangible and verifiable evidence of the nominee's contributions and, if pertinent, relevant significant technical publications, e.g. patents, reports, articles.

• Where a team effort was involved, identify and document the specific technical contributions of the nominee.

• Describe and verify the lasting impact of the nominee’s contribution on society.
Educator

• What impact has the nominee had on education in the field of interest of the IEEE?
• What unique and innovative curricula or courses has the nominee personally developed? What innovative and unique contributions has the nominee made to engineering education as an administrator?
• Has the nominee written a pioneering text in his/her field?
  • What impact have these innovations had? What is the range of acceptance, local, regional or worldwide?
  • Describe and verify the lasting impact of these efforts on engineering education.
Research Engineer/Scientist

• What inventions, discoveries or advances in the state of the art made by the nominee indicate innovation, creativity, and importance of the nominee's research?

• List patents, papers published in refereed journals and other tangible and verifiable evidence of the nominee's accomplishments.

• Where a team effort was involved, identify and document the specific technical contributions of the nominee.

• Describe and verify the lasting impact of the nominee's contributions to society.
Technical Leader

• What outstanding engineering application or scientific accomplishments resulted from a managerial, team, or company-wide effort that was lead by this nominee?

• Explain the technical innovation, difficulties and risk involved, achieving economic acceptability, and other advantages.

• Describe and verify the specific technical contributions that the nominee made which made the achievement possible.

• Describe and verify the lasting impact of the nominee's contribution to society.
Individual Contribution - Summary

• What is the contribution? – what has the nominee invented, created, discovered?

• What impact has it made? – smaller, cheaper, faster, safer? Has it been implemented?

Example 1: Mr. Smith invented a procedure to identify and locate hot spots in transformer winding insulation, resulting in several patents. This procedure was implemented by TransformerX Inc. in its transformer monitoring equipment and has been used by utilities worldwide. It is estimated that this procedure has saved utilities over $500M by identifying transformers requiring maintenance before they failed. (Application Engineer/Practitioner)
Example 2: Dr. Jones was the first person to develop an algorithm for real-time state estimation. Her 1990 paper on the topic has been cited over 200 times in the past 25 years and is recognized as one of the seminal articles in this area. Her algorithms have been integrated into several commercial EMS software packages. (Research Engineer/Scientist)

Example 3: Prof. Washington has developed a comprehensive undergraduate curriculum on smart grid applications. His set of courses is based on his textbook “Smart Grid – Smart Choices” and is accompanied by a series of laboratory exercises and demonstrations. His courses have doubled the enrollments in power engineering at his university. His book and curriculum have been adopted by several universities. (Educator)

Example 4: Mr. Chan served as Chief Technology Officer for PowerNow Inc. from 2002-2009. During this time, Mr. Chan lead the efforts to install smart meters throughout western Georgia and enable distribution automation in over 500 substations. Since 2009, Mr. Chan has served as a consultant to several utilities to modernize their distribution systems. He currently serves as the chair of the PES substations committee and spearheaded the development of standard C57-12.92-2010. (Technical Leader)

Disclaimer: These are fictional and do not refer to actual people or companies.
Evidence of Technical Accomplishment – Part 1

• List the three most important items of tangible and verifiable evidence of technical accomplishments identified
  – technical publications;
  – technical reports and presentations;
  – patents;
  – development of products, applications and systems; and,
  – application of facilities and services.

• In sentence form, state the engineering significance and lasting societal impact of each.
Comments

• The three evidence items should refer directly to the nominee’s contribution – **one or two** most distinctive contributions – should **not** be three unrelated items

• A common error is to list **recent** items (papers, patents, etc.). It is difficult to support **lasting societal impact** unless the items have been public for a while (a decade or more)

• If articles are used as evidence, include citation indices, preferably from Scopus or Web of Science
Evidence of Technical Accomplishment – Part 2

• List not more than 10 additional items, subdivided into distinct areas to support the one or two identified contributions.

• In sentence form, identify the significance and impact of each.
Publications

Quality and impact of publications can be judged based on the technical knowledge of the valuator/Judge, as well as on bibliometric indices. For example, the number of citations, $h$-index, Field Weighted Citation Impact (FWCI), etc. can help in assessing the impact of a Nominee. Evaluators/Judges use their own knowledge for interpreting these metrics, such as what is the “typical” citation count in a specific field.
Patents

• Has the patent been sold or licensed to a third party for use? If yes, what revenues is it generating?

• Is the patent important for the assignee to remain on the cutting edge of the technology area being described? If yes, is it clear what competitive edge the patent describes?

• Has the patent initiated new business for the assignee? If yes, what is the new business venture and how is it benefitting the assignee and the society at large.

• Has the inventor published a refereed technical publication in addition to the patent? If yes, was that paper impactful in the community.

• Has the patent been often cited?
Standards

Impact on standardization (IEEE or not) can be achieved in many ways: a technical leader who submitted influential contributions, led technical discussion, and drove the Working Group to consensus; a scientist that wrote an influential paper containing findings that were adopted in a popular standard; a practitioner whose forward-looking patents became essential to popular standards.
Recapitulation

- Contribution
- Impact
- Evidence

Success
Comments

• The ten evidence items should refer directly to the nominee’s contribution – one or two most distinctive contributions

• Publications – show a sustained contribution in a particular area – not just that nominee is a prolific author

• The majority of the evidence items should pertain to PES (standards, publications, committees)

• The nominator to list each item as a paragraph for easy review at all levels
Comments

• Pieces of evidence that cannot be correlated with one of the impact areas are superfluous.

• Carefully consider a right time to make a nomination with respect to the Nominee’s career progression and achieved accomplishments.

• Allow time for the Nominee’s impact to be recognized and adopted by his/her peers

• Don’t use the Education category unless the Nominee has been truly focused on improving the technical and engineering education and achieved tangible stellar results in the field.
References

- References provide information about the value of the nominee’s contributions
- Try to give a personal perspective. As a fellow (or senior member in Region 9) your personal view will carry weight with the evaluation committee(s)
- No point in repeating the nomination claims for the value of the contributions. The evaluators are looking for confirmation from a different perspective from the nomination.
- Should focus on the nominee’s contribution only
- Each nominator should talk to each referee to ascertain level of support
- A mediocre reference is worse than no reference
References

– Do not choose the most famous Referees in the field who don’t know the Nominee and are not able to personally address their accomplishments.

– Do not choose Referees from only one region of the world.

– Do not choose too many Referees from a single affiliation (all academics for example, or all from the same company).

– Do not choose only Referees who have collaborated with the Nominee.
References: DOs

• Describe how you personally know the nominee and/or their work
  – “I worked with the nominee on the XXXX Standards working group to develop ...”
  – “The nominee spent a month of her sabbatical with my research group and we collaborated on ...”
  – “In my work, I adopted the nominee’s approach to ...”

• Describe the nominee’s contribution in your own words without repeating what was in the nomination narrative

• Provide specific examples of how the nominee’s contribution has impacted the technical field

• Provide both qualitative and quantitative measures of the nominee’s contributions
  – “Her 2005 paper initiated the new field of inquiry into ...”
  – “Reliability increased by 5% when we implemented his program to ...”

• Clearly articulate what the nominee’s contributions were in group work
References: DON’Ts

• Avoid general statements that do not pertain directly to the nominee’s contribution
  – “The nominee is a prolific author.”
  – “The nominee is highly respected in his field.”

• Avoid referring to activities that are not listed as one of his/her contributions. Fellows are elevated based on specific contributions and not for bodies of work.

• Avoid using overly expansive language to describe the nominee’s contributions
Endorsements of Nomination

• Up to three endorsement letters are accepted, but none is required
• Endorsements indicate respect for the nominee in the community.
  – a local IEEE Section or Chapter Chair
  – a technical committee chair
  – a professional engineering organization
  – any other organization that is involved in electrical engineering
• Will have less impact from an individual that does not represent any engineering organization
• Endorsements are not meant to serve as references; so do not have to attest to the value of the contributions of the nominee, but more to the image of the nominee in the endorsing community/organization
Useful Information

Fellow Guides

• **2017 Nominator** (PDF, 189 KB)
• **2017 References and Endorsers** (PDF, 138 KB)
• **2017 Society/Technical Council Evaluations and IEEE Fellow Judges**
  • https://www.ieee.org/membership/fellows/index.html
2018 PES Fellows Nomination Resource Committee

Mariesa Crow, Chair

Members
Chanan Singh
Costas Vournas
Murty Yalla
Branislav Djokic

Have questions? email the FNRC at Fellow_Nominate@ieee.org
Questions?