Application: 4410

Anjanava Biswas, Sr. AI Specialist Solutions Architect

Page: General Information

Provide information about the company to be considered for the award. If you will be nominating an individual, specify the nominee's employer.

Name of Organization/Company

Amazon Web Services (AWS)

Additional Contacts

I do not wish to list additional contacts

Page: Entry Information

Entry Title

Anjanava Biswas, Sr. AI Specialist Solutions Architect

Category

Q11a. Employee of the Year - Information Technology - Cloud Services

Employee Nominee Submission Format

Written Answers

a. Briefly describe the nominated non-executive person's employer: the organization's history and past performance (up to 200 words). Required

Amazon Web Services (AWS) has been at the forefront of machine learning (ML) innovation for over 20 years. ML is deeply integrated into Amazon's operations, from personalization models to demand forecasting and autonomous drone flight. AWS offers a comprehensive suite of ML services and tools, helping over 100,000 customers build, train, and deploy ML models at scale.

Key milestones include the launch of Amazon SageMaker in 2017, which became one of the fastest-growing services in AWS history by incorporating fully managed infrastructure, IDEs, feature stores, AutoML, and no-code capabilities. AWS also offers several innovative fully managed AI Services such as Amazon Textract (computer vision OCR) and Amazon Comprehend (NLP)

Studies show that fine-tuning AWS's pre-trained models can significantly improve accuracy and reduce training time compared to training from scratch. AWS has enabled breakthroughs across industries, from healthcare to sustainability, by providing cutting-edge ML capabilities. Additionally, AWS has been at the forefront of Generative AI in 2023 and 2024 with the launch of Amazon Bedrock and Amazon Q that are helping transform several industries. AWS has pioneered high-performance ML infrastructure like EC2 Trn1 instances for training generative AI models, and AWS Inferentia and Tranium ML Silicon chips.

b. Outline the nominated non-executive employee's achievements since the beginning of 2022 that you wish to bring to the judges' attention (up to 250 words). Required

Since 2022, I have made significant contributions to AI and machine learning at Amazon. In 2022, I delivered innovations in online fraud detection through Amazon Fraud Detector and developed solutions for integrating MLOps workflows with DataWrangler. I made major open-source contributions to the amazon-textract-textractor Framework, which has over 3,000 daily downloads. Additionally, I created AI training courses on computer vision and NLP via AWS Skillbuilder and AWS MLU, which have been taken by more than 1 million professionals in 2022 and 2023. Since 2022 I have published more than 18 technical AI and Cloud intelligence technical articles.

From 2022 to 2023, I focused on R&D in Natural Language Processing, particularly on layout-aware document classification via Amazon Comprehend. I contributed to cost-effective and quantized models for document classification and advanced table data extraction using computer vision-based OCR through Amazon Textract. I developed a Generative AI trust and safety framework for PII safety, toxicity detection, and prompt safety using Amazon Comprehend's NLP models. I also contributed to the integration of these OCR and NLP capabilities to popular open-source LangChain framework. My research led to the development of a Generative AI-based Intelligent Document Processing framework with Amazon Bedrock.

In 2024, I was appointed as a Fellow member of three prestigious institutions and received the International Achievers' Award and Global Recognition Award for Innovation in AI and Machine Learning. I created Rhubarb, an open-source document understanding framework, and was appointed as an Editorial Board member for two reputable journals, peer-reviewing over 20 research papers.

c. Explain why the achievements you have highlighted are unique or significant. If possible compare the achievements to the performance of other employees or to other workers in your industry and/or to the nominee's past performance (up to 250 words). Required

The achievements I have highlighted are unique and significant for several reasons. Firstly, my innovations in AI and machine learning have been adopted by organizations such as Veterans Benefit Administration (VBA) which impacts 18million US Veterans, demonstrating their real-world impact and value. The widespread use of my open-source contributions, with over 3,000 daily downloads, further underscores the significance of my work.

Secondly, my dedication to learning and development sets me apart. My Al training courses have been taken by more than 1 million professionals in just two years. This is an exceptional achievement, showcasing my ability to make complex Al concepts accessible to a broad audience. Moreover, my 18 technical articles published since 2022 demonstrate my commitment to sharing knowledge and advancing the field.

Lastly, my contributions to academia and my recognition as a Fellow member of three prestigious institutions highlight my unique standing within my department. The International Achievers' Award and Global Recognition Award for Innovation in Al/ML further validate the significance of my work. As an Editorial Board member for two reputable journals and having peer-reviewed over 20 research papers, I have demonstrated an unparalleled dedication to academic excellence.

In comparison to my colleagues and industry peers, my achievements stand out in terms of their practical impact, educational value, and academic recognition. The breadth and depth of my contributions, spanning innovations, open-source projects, learning initiatives, and academic engagement, are a testament to my exceptional performance and dedication to the field of AI and machine learning.

d. Reference any attachments of supporting materials throughout this nomination and how they provide evidence of the claims you have made in this nomination (up to 250 words). Optional

- 1. See Fellowship and Senior Membership evidence in Memberships.pdf file
- 1.a. IEEE, USA Senior Member (Member # 99706233) www.ieee.org
- 1.b. Fellow of The British Computer Society, UK (FBCS) (Member # 995136536) www.bcs.org
- 1.c. Fellow of The Institution of Engineering and Technology, UK (FIET) (Member # 1101162413) www.theiet.org
- 1.d. Fellow of The Institution of Electronics and Telecommunication, India (IETE) (Member # F-504185) www.iete.org
- 2. Refer to Journal_Editorial_Board_Letters.pdf for letters of my appointment to Science and Research Journals.
- 2.a. https://thesciencebrigade.com/icir/about/editorialTeam
- 2.b. https://thesciencebrigade.com/jair/about/editorialTeam
- 3. Refer to my website www.anjanbiswas.dev > Articles (from top menu) to view all the technical articles related to all of my Al ML innovations.
- 4. Refer to my website www.anjanbiswas.dev > Projects (from top menu) to view all of my open-source projects.
- 5. Refer to media coverage https://www.globalbankingandfinance.com/ai-and-open-source-how-ai-architect-anjanava-biswas-latest-research-is-shaping-open-source-adoption/ on my open-source contributions.
- 6. Refer to media coverage for International Achievers' Awards which also covers the AI ML courses created by me https://www.outlookindia.com/hub4business/anjanava-biswass-impactful-contributions-to-ai-and-machine-learning-earn-international-acclaim
- 7. Refer to Business Insider press-release for announcement of my 2024 Global Recognition Awards https://markets.businessinsider.com/news/stocks/anjanava-biswas-wins-a-2024-global-recognition-award-1033245402
- 8. Refer to the additional media links that covers all of my business technology and IT innovations
- 8.a.Digitaljourna
- 8.b.Entrepreneur.com
- 8.c.TechBullion
- 8.d.TechTimes
- 8.e. Asia One
- 9. Refer to Anjanava_Biswas_Thought_Leadership.pdf document for an easy to access collection of all my achievements including my public speaking engagements, technical publications etc.

Webpage Link

www.anjanbiswas.dev (http://www.anjanbiswas.dev)

Would you like to add an additional webpage link?

Yes

Webpage Link 2

https://www.globalbankingandfinance.com/ai-and-open-source-how-ai-architect-anjanava-biswas-latest-research-is-shaping-open-source-adoption/ (https://www.globalbankingandfinance.com/ai-and-open-source-how-ai-architect-anjanava-biswas-latest-research-is-shaping-open-source-adoption/)

Would you like to add an additional webpage link?

Yes

Webpage Link 3

https://www.outlookindia.com/hub4business/anjanava-biswass-impactful-contributions-to-ai-and-machine-learning-earn-international-acclaim (https://www.outlookindia.com/hub4business/anjanava-biswass-impactful-contributions-to-ai-and-machine-learning-earn-international-acclaim)

Would you like to add an additional webpage link?

Yes

Web Page Link 4

https://markets.businessinsider.com/news/stocks/anjanava-biswas-wins-a-2024-global-recognition-award-1033245402 (https://markets.businessinsider.com/news/stocks/anjanava-biswas-wins-a-2024-global-recognition-award-1033245402)

Would you like to add an additional webpage link?

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Web Page Link 5

https://www.digitaljournal.com/tech-science/how-the-public-sector-is-tackling-its-most-challenging-problems-with-ai/article (https://www.digitaljournal.com/tech-science/how-the-public-sector-is-tackling-its-most-challenging-problems-with-ai/article)

Would you like to add an additional webpage link?

Yes

Web Page Link 6

https://www.entrepreneur.com/ka/business-news/battling-multi-billion-dollar-online-fraud-industry-with-ai/465795 (https://www.entrepreneur.com/ka/business-news/battling-multi-billion-dollar-online-fraud-industry-with-ai/465795)

Would you like to add an additional webpage link?

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Web Page Link 7

https://techbullion.com/generative-ai-the-next-big-thing-in-intelligent-document-processing-real-world-applications-from-an-ai-solutions-architect/ (https://techbullion.com/generative-ai-the-next-big-thing-in-intelligent-document-processing-real-world-applications-from-an-ai-solutions-architect/)

Would you like to add an additional webpage link?

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Web Page Link 8

https://www.techtimes.com/articles/297735/20231019/how-to-ensure-trust-while-pushing-boundaries-in-generative-ai-ai-architect-anjanava-biswas-shares-insights.htm (https://www.techtimes.com/articles/297735/20231019/how-to-ensure-trust-while-pushing-boundaries-in-generative-ai-ai-architect-anjanava-biswas-shares-insights.htm)

Would you like to add an additional webpage link?

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Web Page Link 9

https://www.asiaone.com/business/ai-expert-anjanava-biswas-honored-international-achievers-award-indian-achievers-forum (https://www.asiaone.com/business/ai-expert-anjanava-biswas-honored-international-achievers-award-indian-achievers-forum)

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Web Page Link 10

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Supporting Document

Download File (https://stevies-tech.secure-

platform.com/file/66712/eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJtZWRpYUlkIjo2NjcxMiwiYWxsb3dOb3RTaWduZWRVcmwiOiJGYWxzZSIsImlnbm9y; sqOsFM6MY5miQFWm4XkL3M5rJw2zUC7Zc?Anjanava_Biswas_Resume_2024.pdf)

Would you like to add an additional supporting document?

Yes

Supporting Document 2

Download File (https://stevies-tech.secure-

platform.com/file/66713/eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJtZWRpYUlkIjo2NjcxMywiYWxsb3dOb3RTaWduZWRVcmwiOiJGYWxzZSIsImlnbm9yVyxG8AJaDi-VC7Gf-H6hKwMCaotmc43jgmgoZwc?Memberships.pdf)

Would you like to add an additional supporting document?

Yes

Supporting Document 3

Download File (https://stevies-tech.secure-

platform.com/file/66714/eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJtZWRpYUlkIjo2NjcxNCwiYWxsb3dOb3RTaWduZWRVcmwiOiJGYWxzZSIsImlnbm9y Journal_Editorial_Board_Letters.pdf)

Would you like to add an additional supporting document?

Yes

Supporting Document 4

Download File (https://stevies-tech.secure-

platform.com/file/66715/eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJtZWRpYUlkIjo2NjcxNSwiYWxsb3dOb3RTaWduZWRVcmwiOiJGYWxzZSIsImlnbm9yAnjanava_Biswas_Thought_Leadership.pdf)

Would you like to add an additional supporting document?

By your submission of this entry to The Stevie Awards, you verify that you have read and agreed to abide by the regulations, terms and conditions of the competition (https://www.asia.stevieawards.com/rules-and-terms-conditions-competition).

Terms and Conditions

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