107-B, Girikunj, 390, S.N.Roy Road,
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NEHA UPADHYAY

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EMPLOYMENT

Software Engineer | **Envestnet Yodlee, Bengaluru** | **July 2019 - Present**

- Wrote extensive multi-threaded JDBC programs for the Oracle database to PostgreSQL in AWS migration project for execution of 7000+ SQL queries in less than 30 minutes.
- Designed end-to-end automated solutions, curl, telnet, synthetic monitoring scripts in python and shellscript and php dashboards to bring down the number of incidents missed by 60%.

National Institute of Technology

Research Assistant | **Durgapur** | **July 2018 - July 2019**

- Designed an Energy Based Generative Adversarial Network that exhibited higher stability than normal GANs and a dice coefficient of 88.7.
- Developed CSNet: A composite deep neural network for segmentation that topped the leader boards in the MICCAI ISLES 2015 challenge.

Software Development Intern | **MAQ Software, Hyderabad** | **May 2018 - July 2018**

- Formulated compact code to integrate two intermediate databases into one to improve the efficiency of dependent analytical processing cubes.
- Worked with technologies like SQL Server Management Studio, Integration Services, Microsoft Power BI, and Visual Studio among other tools.

Indian Institute of Technology

Research Intern | **Delhi** | **May 2017 - July 2017**

- Designed a tracking engine for the architectural simulator, TEJAS, with the aim of extending it to simulate Android architecture in addition to the x86 family.

EDUCATION

National Institute of Technology

Durgapur, West Bengal | **Durgapur** | **July 2015 - June 2019**

- Bachelor of Technology in Computer Science and Engineering. Overall **CGPA: 9.35/10.**
- Undergraduate Coursework: Operating Systems; Databases; Algorithms; Programming Languages; Computer Architecture; Artificial Intelligence; Data Analytics; Digital Image processing.

TECHNICAL EXPERIENCE

Projects

- **E-commerce Website for a Sustainable living brand, Gaia** (2020). Built an e-commerce website for a self-owned sustainable living brand, Gaia.
- **PIRNet: Two-step Deep Neural Network for Segmentation of Brain MRI with Efficient Loss Functions** (2019-20). PIRNet has been applied to the task of brain MRI segmentation of cerebrospinal fluid, gray matter, white matter, and background over several loss functions.
- **CSNet: A New DeepNet Framework for Ischemic Stroke Lesion Segmentation ,** Computer Methods and Programs in Biomedicine, p.105524 (2018-19). Built a composite deep neural network combining fractal networks and the U-Net model for state-of-the-art segmentation results.
- **Energy-Based Generative Adversarial Network (EBGAN) for Effective Semantic Segmentation of Brain Gliomas Segmentation** (2018). EBGAN model employs an energy function to discriminate between the real and synthetically generated samples and exhibits higher stability during training than regular GANs.

AWARDS

- **Special Mention Award, Operations Innovation Fest, Envestnet Yodlee (2019):** For the most innovative automatic incident resolution idea submission and presentation.

LANGUAGES AND CERTIFICATIONS

- Python; C++; Java; HTML ; CSS; PHP; Bootstrap; SQL; Shell; Latex.
- Neural Networks and Deep learning, AWS Cloud Practitioner, Web Development Training.