Samaresh K. Nayak

Curriculum Vitae

BSc Computer Science (Hons)

samnayak@live.co.uk samnayak.com samnayak.com linkedin.com/in/sam-nayak github.com/sam-nayak github.com/sam-nayak \$\mathcal{Q}\$

Profile

BSc in Computer Science at the University of Huddersfield (recent graduate). Detail-oriented programmer with 8 years' experience devising adaptive solutions tailored and designed for flexible business and user requirements. Advanced programming knowledge complemented by a proven ability to assimilate and utilise technologies with efficient results.

University	\mathbf{of}
Huddersfie	ld

2017 - 2020

BSC COMPUTER SCIENCE (HONS)

- Graduated with First-Class Honours, $\bf 85.39\%$ weighted average.
- Relevant modules include: Large-Scale Software Engineering; Object-Oriented Systems Development; Computational Mathematics; Artificial Intelligence; Algorithms, Processes and Data; Relational Databases and Web Integration.

Education

Lawnswood School

2010 - 2017

- GCSE Computer Science, Mathematics, Science [Biology, Chemistry, Physics] (AA ABB), and 6 additional GCSEs grade B or above.
- AS-level Computer Science, Psychology, Mathematics, Chemistry (BBCE).
- - Extended Project Qualification [EPQ] (B).

Volunteer IT Mentor

 ${\tt Jun-Dec~2016}$

MAECARE

Volunteered for an organisation in which I mentored I.T. skills to elderly people enabling them to manage and understand technology.

Experience

Work Experience Student

Aug 2016

SKY

Gained hands-on work experience directly with software developers at Sky doing front-end web development using Node.js via the Atom editor. The experience allowed me to understand the expectations of programming at an industrial level using the Agile software methodology.

My communication and teamwork skills also improved since we worked in small teams of five with a combination of pair-programming.

Technical

Skills

Languages:Python \cdot JavaScript \cdot Java \cdot C++ \cdot LATEXParadigms:Imperative \cdot Object-oriented \cdot Procedural

Web Dev.: $HTML5 \cdot CSS3 \cdot Git \cdot jQuery \cdot Jekyll$

 $\textbf{Libraries} : \qquad \quad \text{TensorFlow} \cdot \text{Keras} \cdot \text{PyTorch} \cdot \text{NumPy} \cdot \text{Matplotlib}$

Dev. Tools: Atom · Android Studio · JetBrains' IDEs · Visual Paradigm · Visual Studio

Awards

2016 Tim Berners-Lee Award Computing/ICT, Lawnswood School.

• Frequently create small-scale programs and scripts for personal use, and increase my knowledge of computer science by reading around the field. Some of my favourite books include Clean Code: A Handbook of Agile Software Craftsmanship, Structure and Interpretation of Computer Programs, The C Programming Language, and The Art of Computer Programming.

Hobbies and Interests

- Write and solve programming problems on codewars.com (ranked in top 1% with 1,200+code challenges completed).
- Enthusiastic learner and active participant in online quizzes, such as jetpunk.com (ranked in top 1% with 4,500+ quizzes completed) and sporcle.com (with 800+ quizzes completed).
- Avid badminton player for nine years. Member of a badminton society, in which I play two hours a week.

BSc Final-year Project 🗷

Title: A Synthesised Fuzzy Deep Neural Network for Image Classification

Institution & Date: University of Huddersfield, 2019–2020

Grade: 1^{st} (83%)

Summary: A deep learning Python project that classified images (CIFAR-10 dataset) using a specific neural network called a 'synthesised fuzzy deep neural network'. This model combined a traditional neural network alongside a fuzzy system in a hierarchical structure (written thesis included).

Projects

Title: Algorithmic Sudoku Generation and Solution Institution & Date: Lawnswood School, 2016–2017

Grade: A* (92%)

Summary: A web-based JavaScript Sudoku generator and solver (written report

included). Allowed custom generation, and solved via backtracking.

Extended Project Qualification

Title: Genetic Algorithms as an Approach for Machine Learning

Institution & Date: Lawnswood School, 2015–2016

Grade: B (72%)

Summary: A Python program that used a basic genetic algorithm to evolve randomly generated bit strings in order to match an ideal solution from an initial problem (written report included).

References

References available upon request.