NILABJA SARKAR

J + (91) 8768884016 \diamond West Bengal,India

☑ nil.sarkar002@gmail.com ♦ in Linkdin ♦ 🕥 github

EDUCATION

M.TECH Computer Science, University of Hyderabad

Expected 2023

Relevant Coursework: Computer Networks, Operating Systems, Algorithms, Deep learning.

GPA: 8.5

B.TECH Information Technology, Jalpaiguri Govt. Engineering College

2014 - 2018

Relevant Coursework: Database, SQL, Programming and Data Structure, XML

GPA: 8.3

SKILLS

Programming Skills Technical Skills C, C++, JAVA, Python, JAVAscript, Object Oriented Programming(oops).

Kubernetes(k8s), Linux, Git, Docker, CI/CD, , SDLC

EXPERIENCE

Software Developer Intern

Aug 2022 - Jul 2023

ACL digital

Hyderabad, India

- I accomplished successful implementation of Kubernetes projects by efficiently managing YAML files, deploying applications, and creating docker images.
- I accomplished the development of a JavaScript and Node.js application in the backend, seamlessly connecting it with a Docker container housing a MongoDB database.
- Worked collaboratively in a 5-member team to explore and validate use cases for gateway API.

PROJECTS

Automatic Fish Detection. In this project we developed a solution for image classification of fish species found in Indian seas.

- Implemented transfer learning models (MobileNet V2, ResNet-50, VGG-19) to classify six tuna fish species and achieved 97% accuracy. Used augmentation techniques to increase data-set volume and model performance.
- As a Team project we have Collected and curated a unique data-set of Indian sea fish species (6000 image data) sample, Training data-set on our own.
- Used TensorFlow, OpenCV, Python, Fast.AI, PyTorch, Keras, NumPy, scikit-learn, Matplotlib, Seaborn, Pillow.

MAZE solver Visualization. Designed a visual maze solver using Python and Tkinter. Performed Unit Testing

- It draws a randomized maze using BFS algorithm and then systematically solves it.
- Here I have used Breath first search(BFS) and Depth first Search(DFS) algorithms.

Password Checker. Developed a secure password checker tool using python and a Pwned Password API

- Implemented an API integration that allows users to verify if their passwords have ever been compromised in data breaches.
- This tool provides valuable insights and helps users identify the need for password updates or improvements to enhance their online security.

EXTRA-CURRICULAR ACTIVITIES

- 1st Prize in Smart India Hackathon, internal Hackthon conducted by University of Hyderabad
- Volunteer Experience: Teacher at Jyoti(NGO JGEC).(2016-2018)

PIRATE KING

□ LinkedIn | □ 123-456-7890 | ⊕ piratekingdom.com | M pirateking@gmail.com | O GitHub

Skills _____

- C# | .NET | Java | JavaScript | TypeScript | C++ | C | CosmosDB | MSSQL | Node | Express | React | Vue | Redux | jQuery | NoSQL | Git
- Azure | Cloud Computing | CI/CD | XUnit | Jest | Cucumber | Nightwatch | Unit Testing | Lambda | OOP | Unity 2D | Game Development
- Microservices | Distributed Systems | Frontend | Backend | Full-Stack | English, Korean, Japanese All professional proficiency or above

Experience _

YouTuber 07/2021 - Current **YouTube**

PIRATE KING, Software Engineering, SWE Skits & Entertainment, Tech Life, Coding, Career Advice, LeetCode

Software Engineer

Microsoft

Redmond, WA, USA

05/2018 - 04/2022

- Led the design and development of multiple enterprise-level microservice applications of Commerce Experience Group, driving \$35.3 billion of revenue every year using the latest technologies of Azure, C#, .NET, Cosmos DB, Azure Functions, Key Vault, and MS Graph.
- Designed and implemented scalable APIs and background workers for managing first- and third-party proprietary licenses using .net Core, Azure Functions, and other Azure cloud technologies that serve millions of license requests daily.
- Led the development of several products E2E, from identifying system requirements and partner dependencies to workload balancing, software implementation, engineering, testing, and configuring metrics, alarms, monitors, and dashboards.
- Enriched system metrics by integrating the platforms with telemetry; facilitated in-depth logging by correlating APIs with vector contexts.
- Continuous Integration/Deployment Pipeline Integration, pull requests, code reviews, load/stress testing, unit/integration/e2e testing

Software Development Engineer

<u>Amazon</u>

Seattle, WA, USA 04/2017 - 04/2018

- Implemented enterprise applications of Prime's Content Experiment Platforms using Java, React, AngularJS, AWS, and DynamoDB.
- Designed and developed systems facilitating marketers to perform various optimization experiments within the Prime ecosphere.
- Automated and optimized business logic for the core marketing experiments, including A/B, Auto-Targeting, and Multivariate Testing.
- Completely automated the marketing platforms' user-experience testing process by integrating Nightwatch Selenium.

Software Engineer

ebay

Seoul, South Korea 12/2014 - 03/2017

- Designed and implemented enterprise fintech applications of South Korea's largest e-commerce platforms (Gmarket, Auction, SmilePay), driving monthly revenue of \$1 billion using C# .NET, MVC, MSSQL, node, react, redux, and jQuery.
- Reported directly to CPO: Engineering lead for designing and developing the fintech transaction dashboard that provides a rich visual summary of daily user purchase patterns powered by Google Chart. Used by the board of directors in the decision-making process.
- Engineering owner of the E2E experience of the commerce platform's cancel, return, and exchange systems (PC/Mobile).
- Integrated multiple third-party systems with the escrow platform, including Alipay, increasing global revenue by 23% in the first quarter.

Software Engineer, Intern

NCSoft

Seoul, South Korea 07/2014 - 08/2014

• Fashion Street: Mobile social game application development (Cocos2D/C++)

Software Engineer, Contract

Cyberstep

Tokyo, Japan

06/2013 - 12/2013

Combat Bots Cosmic Commander: Mobile RTS game client and server development (ActionScript3 & Java)

Education

Bachelor of Science

Carnegie Mellon University

Pittsburgh, PA, USA 08/2007 - 12/2010

Major in Electrical and Computer Engineering

Projects _

- COLORMAN: Creator of a 2D mobile strategy puzzle game (Unity 2D, C#, Android, iOS). Link to YouTube Gameplay (07/2020)
- SPIKE: Designed and developed an award-winning action puzzle game SPIKE at a Game Development Competition in Japan (03/2013)

Mentorship _

- Springboard: Coding Bootcamp Mentor responsible for mentoring and giving career advice to SWE students (01/2021 04/2022)
- Computer Science Tutor: Programming | Data Structure and Algorithms | career advice | coding interview prep | professional portfolio

- Bronze Award: Won 4th prize for the development of action game SPIKE at HAL Game Development Competition in Tokyo (03/2013)
- Certificate of Japanese Language Proficiency N1: The highest-level certificate of Japanese proficiency (24.1% Pass Rate) (02/2014)

NILABJA SARKAR

J + (91) 8768884016 \diamond West Bengal,India

☑ nil.sarkar002@gmail.com ♦ in Linkdin ♦ 🕥 github

EDUCATION

M.TECH Computer Science, University of Hyderabad

Expected 2023

Relevant Coursework: Computer Networks, Operating Systems, Algorithms, Deep learning.

GPA: 8.5

B.TECH Information Technology, Jalpaiguri Govt. Engineering College

2014 - 2018

Relevant Coursework: Database, SQL, Programming and Data Structure, XML

GPA: 8.3

SKILLS

Programming Skills Technical Skills C, C++, JAVA, Python, JAVAscript, Object Oriented Programming(oops).

Kubernetes(k8s), Linux, Git, Docker, CI/CD, , SDLC

EXPERIENCE

Software Developer Intern

Aug 2022 - Jul 2023

ACL digital

Hyderabad, India

- I accomplished successful implementation of Kubernetes projects by efficiently managing YAML files, deploying applications, and creating docker images.
- I accomplished the development of a JavaScript and Node.js application in the backend, seamlessly connecting it with a Docker container housing a MongoDB database.
- Worked collaboratively in a 5-member team to explore and validate use cases for gateway API.

PROJECTS

Automatic Fish Detection. In this project we developed a solution for image classification of fish species found in Indian seas.

- Implemented transfer learning models (MobileNet V2, ResNet-50, VGG-19) to classify six tuna fish species and achieved 97% accuracy. Used augmentation techniques to increase data-set volume and model performance.
- As a Team project we have Collected and curated a unique data-set of Indian sea fish species (6000 image data) sample, Training data-set on our own.
- Used TensorFlow, OpenCV, Python, Fast.AI, PyTorch, Keras, NumPy, scikit-learn, Matplotlib, Seaborn, Pillow.

MAZE solver Visualization. Designed a visual maze solver using Python and Tkinter. Performed Unit Testing

- It draws a randomized maze using BFS algorithm and then systematically solves it.
- Here I have used Breath first search(BFS) and Depth first Search(DFS) algorithms.

Password Checker. Developed a secure password checker tool using python and a Pwned Password API

- Implemented an API integration that allows users to verify if their passwords have ever been compromised in data breaches.
- This tool provides valuable insights and helps users identify the need for password updates or improvements to enhance their online security.

EXTRA-CURRICULAR ACTIVITIES

- 1st Prize in Smart India Hackathon, internal Hackthon conducted by University of Hyderabad
- Volunteer Experience: Teacher at Jyoti(NGO JGEC).(2016-2018)

PIRATE KING

□ LinkedIn | □ 123-456-7890 | ⊕ piratekingdom.com | M pirateking@gmail.com | O GitHub

Skills _____

- C# | .NET | Java | JavaScript | TypeScript | C++ | C | CosmosDB | MSSQL | Node | Express | React | Vue | Redux | jQuery | NoSQL | Git
- Azure | Cloud Computing | CI/CD | XUnit | Jest | Cucumber | Nightwatch | Unit Testing | Lambda | OOP | Unity 2D | Game Development
- Microservices | Distributed Systems | Frontend | Backend | Full-Stack | English, Korean, Japanese All professional proficiency or above

Experience _

YouTuber 07/2021 - Current **YouTube**

PIRATE KING, Software Engineering, SWE Skits & Entertainment, Tech Life, Coding, Career Advice, LeetCode

Software Engineer

Microsoft

Redmond, WA, USA

05/2018 - 04/2022

- Led the design and development of multiple enterprise-level microservice applications of Commerce Experience Group, driving \$35.3 billion of revenue every year using the latest technologies of Azure, C#, .NET, Cosmos DB, Azure Functions, Key Vault, and MS Graph.
- Designed and implemented scalable APIs and background workers for managing first- and third-party proprietary licenses using .net Core, Azure Functions, and other Azure cloud technologies that serve millions of license requests daily.
- Led the development of several products E2E, from identifying system requirements and partner dependencies to workload balancing, software implementation, engineering, testing, and configuring metrics, alarms, monitors, and dashboards.
- Enriched system metrics by integrating the platforms with telemetry; facilitated in-depth logging by correlating APIs with vector contexts.
- Continuous Integration/Deployment Pipeline Integration, pull requests, code reviews, load/stress testing, unit/integration/e2e testing

Software Development Engineer

<u>Amazon</u>

Seattle, WA, USA 04/2017 - 04/2018

- Implemented enterprise applications of Prime's Content Experiment Platforms using Java, React, AngularJS, AWS, and DynamoDB.
- Designed and developed systems facilitating marketers to perform various optimization experiments within the Prime ecosphere.
- Automated and optimized business logic for the core marketing experiments, including A/B, Auto-Targeting, and Multivariate Testing.
- Completely automated the marketing platforms' user-experience testing process by integrating Nightwatch Selenium.

Software Engineer

ebay

Seoul, South Korea 12/2014 - 03/2017

- Designed and implemented enterprise fintech applications of South Korea's largest e-commerce platforms (Gmarket, Auction, SmilePay), driving monthly revenue of \$1 billion using C# .NET, MVC, MSSQL, node, react, redux, and jQuery.
- Reported directly to CPO: Engineering lead for designing and developing the fintech transaction dashboard that provides a rich visual summary of daily user purchase patterns powered by Google Chart. Used by the board of directors in the decision-making process.
- Engineering owner of the E2E experience of the commerce platform's cancel, return, and exchange systems (PC/Mobile).
- Integrated multiple third-party systems with the escrow platform, including Alipay, increasing global revenue by 23% in the first quarter.

Software Engineer, Intern

NCSoft

Seoul, South Korea 07/2014 - 08/2014

• Fashion Street: Mobile social game application development (Cocos2D/C++)

Software Engineer, Contract

Cyberstep

Tokyo, Japan

06/2013 - 12/2013

Combat Bots Cosmic Commander: Mobile RTS game client and server development (ActionScript3 & Java)

Education

Bachelor of Science

Carnegie Mellon University

Pittsburgh, PA, USA 08/2007 - 12/2010

Major in Electrical and Computer Engineering

Projects _

- COLORMAN: Creator of a 2D mobile strategy puzzle game (Unity 2D, C#, Android, iOS). Link to YouTube Gameplay (07/2020)
- SPIKE: Designed and developed an award-winning action puzzle game SPIKE at a Game Development Competition in Japan (03/2013)

Mentorship _

- Springboard: Coding Bootcamp Mentor responsible for mentoring and giving career advice to SWE students (01/2021 04/2022)
- Computer Science Tutor: Programming | Data Structure and Algorithms | career advice | coding interview prep | professional portfolio

- Bronze Award: Won 4th prize for the development of action game SPIKE at HAL Game Development Competition in Tokyo (03/2013)
- Certificate of Japanese Language Proficiency N1: The highest-level certificate of Japanese proficiency (24.1% Pass Rate) (02/2014)