Untitled Resume

SKILLS


```
[
  "Python",
  "Java",
  "C++",
  "C",
  "SQL",
  "MATLAB",
  "HTML",
  "CSS",
  "JavaScript",
  "AWS",
  "ANSYS",
  "Microsoft Office 365",
  "GitHub",
  "VS Code",
  "React",
  "Node.js",
  "PyTorch",
  "TensorFlow",
  "NumPy",
  "Pandas",
  "Machine Learning",
  "Design Optimization",
  "Compiler Design",
  "Syntax Analysis",
  "NIST Cybersecurity"
]
```


SUMMARY


```
{
  "bio": "Computer Science & AI student at NJIT with 4+ months of machine learning research experience and 4+ projects across multiple programming languages, including Python, Java, C++, and SQL. Skilled in building AI models, developing full-stack applications, and performing data-driven analysis, with a strong interest in applying technology to solve real-world challenges",
  "title": "Computer Science & AI student",
  "contact": {
    "email": "sr2452@njit.edu",
    "phone": "(551) 263-7509",
    "location": "Newark, NJ"
  },
  "full_name": "Sujal Raj"
}
```


PROJECTS


```
[
  {
    "name": "LEXICAL ANALYZER, PARSER, AND INTERPRETER",
    "role": "",
    "end_date": "",
    "start_date": "",
    "description": "Built a compiler pipeline in C++ with lexical analyzer, parser (CFG-based), and interpreter to process 100+ lines of code, gaining hands-on compiler design and semantic analysis experience",
    "technologies": "C++"
  },
```

```
  {
    "name": "SUPERVISED MACHINE LEARNING MODEL EVALUATION",
    "role": "",
    "end_date": "",
    "start_date": "",
    "description": "Performed EDA, preprocessing, and model evaluation on a 10+ feature dataset, comparing logistic regression and decision tree classifiers using accuracy, precision, and MSE",
    "technologies": ""
  }
]
```


EDUCATION


```
[
  {
    "gpa": "3.5",
    "field": "Computer Science",
    "degree": "Bachelor of Science",
    "honors": "Dean’s Scholar: Fall 2022, Spring 2023, Fall 2023, Spring 2024",
    "institution": "New Jersey Institute of Technology",
    "graduation_date": "May 2026"
  }
]
```


EXPERIENCE


```
[
  {
    "title": "Research Assistant, AI for Automotive Safety",
    "company": "NJIT | Grace Hopper AI Research",
    "current": true,
    "end_date": "",
    "location": "Newark, NJ",
    "start_date": "June 2025",
    "description": "Developing AI surrogates with graph neural networks (MeshGraphNets) and PINNs to accelerate FEA on 1000+ simulation cases, targeting 50–80% faster runtimes. Researching design optimization of FRC bumper beams and adaptive foam headrests, analyzing 20+ structural configurations for improved crash resilience and user comfort. Leveraged GitHub for collaborative development, version control, and identifying similar code structures, improving model reproducibility and team productivity."
  },
  {
    "title": "Tutor",
    "company": "NJIT | Ying Wu College of Computing",
    "current": true,
    "end_date": "",
    "location": "Newark, NJ",
    "start_date": "Sep 2025",
    "description": "Guided 30+ students in Python, Java, C++, C, and Linux, reinforcing coding best practices, debugging, and algorithmic problem-solving. Simplified data structures, algorithms, OOP, and system programming concepts for 30+ students, improving project outcomes and technical proficiency by 25%+."
  },
  {
    "title": "Solution Architect",
    "company": "VERIZON",
    "current": false,
    "end_date": "Aug 2021",
    "location": "Jersey, NJ",
    "start_date": "June 2021",
    "description": "Evaluated 200+ buildings daily for clients such as Marriott and Macy’s, using Verizon’s tools to assess 5G suitability based on height, location, and tower proximity. Flagged 200+ qualified buildings and delivered insights to support Verizon’s 5G deployment, enhancing client connectivity and aligning with business goals."
  },
```

```
  {
    "title": "Risk Analyst",
    "company": "IQ4",
    "current": false,
    "end_date": "Aug 2021",
    "location": "Jersey, NJ",
    "start_date": "June 2021",
    "description": "Assessed 2+ cybercrime scenarios using the NIST Cybersecurity Framework, focusing on threats like malware and data breaches. Identified financial and reputational risks, proposed mitigation strategies, and strengthened team communication and collaboration skills."
  }
]
```


CERTIFICATIONS

[]