

WAPH-Web Application Programming and Hacking

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Figure 1: Ruthvik Suvarnakanti

Individual Project 1 - Professional Profile Website

Overview: To fulfill the technical aspects of the project, a front-end web development initiative was undertaken to craft a professional profile website. Leveraging fundamental JavaScript, JQuery, and React library functionalities, the website was imbued with interactive elements and dynamic content. Integration of two public web APIs was seamlessly executed, enriching the user experience with real-time data retrieval. Employing JavaScript cookies further enhanced personalization, ensuring returning visitors are greeted warmly upon revisiting the site.

Complementing the technical requirements, a choice was made to adopt an open-source Bootstrap framework for streamlined design and layout development. Additionally, the inclusion of Google Analytics page tracker offers valuable insights into user engagement metrics, facilitating continuous optimization efforts. Through meticulous adherence to both technical and non-technical stipulations, the deployed website on GitHub Pages emerges as a polished showcase of skills and expertise, delivering an immersive and informative experience to its audience.

Link to the repository: <https://github.com/suvarnrk/suvarnrk.github.io/blob/main/README.md>

I developed my personal portfolio by customizing a Bootstrap template to meet project requirements. It showcases my professional profile, including my name, headshot, contact details, educational background, work experiences, and skills. Additionally, I added a link to a new HTML page to present completed Hackathons and Labs from the WAPH course. This portfolio serves as a comprehensive overview of my qualifications, experiences, and achievements in web development. Through strategic customization and addition of relevant content, I aim to provide visitors with a clear understanding of my capabilities and accomplishments.

Link to Personal Portfolio: <https://suvarnrk.github.io/index.html>

The below source code displays the information and navigation bar information , they include information about person, education, experiences, skills, certifications, resume and link to WAPH course work.

```

suvarnrk.github.io / index.html
Code Blame 304 Lines (290 loc) · 16.6 KB Code 55% faster with GitHub Copilot Raw Download Edit View
</script>
<body id="page-top">
  <!-- Navigation-->
  <nav class="navbar navbar-expand-lg navbar-dark bg-primary fixed-top" id="sideNav">
    <a class="navbar-brand js-scroll-trigger" href="#page-top">
      <span class="d-block d-lg-none">Ruthvik Suvarnakanti</span>
      <span class="d-none d-lg-block"></span>
    </a>
    <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-target="#navbarResponsive" aria-controls="navbarResponsive" aria-expanded="false" aria-label="Toggle navigation">
      <span class="navbar-toggler-icon"></span>
    </button>
    <div class="collapse navbar-collapse" id="navbarResponsive">
      <ul class="navbar-nav">
        <li class="nav-item"><a class="nav-link js-scroll-trigger" href="#about">About</a></li>
        <li class="nav-item"><a class="nav-link js-scroll-trigger" href="#experience">Experience</a></li>
        <li class="nav-item"><a class="nav-link js-scroll-trigger" href="#education">Education</a></li>
        <li class="nav-item"><a class="nav-link js-scroll-trigger" href="#skills">Skills</a></li>
        <li class="nav-item"><a class="nav-link js-scroll-trigger" href="#certifications">Certifications</a></li>
        <li class="nav-item"><a class="nav-link js-scroll-trigger" href="#awards">Awards & Achievements</a></li>
        <li class="nav-item"><a class="nav-link js-scroll-trigger" href="#waph">WAPH</a></li>
        <li class="nav-item"><a class="nav-link js-scroll-trigger" href="work/resume.pdf">Resume</a></li>
      </ul>
    </div>
  </nav>
  <!-- Page Content-->
  <div class="container-fluid p-0">
    <!-- About-->
    <section class="resume-section" id="about">
      <div class="resume-section-content">
        <div id="greeting-root"></div>
        <script src="welcome.js"></script>
        <div id="greetingCookie">Hello</div>
        <div class="name-clock-container" style="display: flex; align-items: center;">
          <div>
            <h1 class="mb-0">
              Ruthvik
            <span class="text-primary">Suvarnakanti</span>

```

Figure 2: About and intro

```
Code Blame 384 Lines (290 loc) · 16.6 KB Code 55% faster with GitHub Copilot Raw [Download] [Edit] [Copy]
```

```
<!-- Page Content -->
<div class="container-fluid p-0">
  <!-- About -->
  <section class="resume-section" id="about">
    <div class="resume-section-content">
      <div id="greeting-root"></div>
      <script src="welcome.js"></script>
    <div id="greetingCookie">Hello</div>
    <div class="name-clock-container" style="display: flex; align-items: center;">
      <div>
        <h1 class="mb-0">
          Ruthvik
          <span class="text-primary">Suvarnakanti</span>
        </h1>
        <div class="subheading mb-5">
          201 Klotter Ave, Apt A7, Cincinnati Ohio, 45219.
          <span id="mailId" onclick="showOrHideEmail()" style="cursor: pointer; text-decoration: underline;">Find My Mail</span>
          <script src="email.js"></script>
        </div>
      </div>
      <!-- Clock next to the name -->
      <canvas id="analog-clock" width="150" height="150" style="margin-left: 20px; background-color: #808000;"></canvas>
      <script src="https://waph-uc.github.io/clock.js"></script>
    </div>
    <p class="lead mb-5">Experienced Systems Engineer proficient in .NET Framework and ASP.NET Core, with expertise in MVC Architecture and</p>
    <div class="social-icons">
      <div class="social-icon">
        <a class="social-icon" href="https://www.linkedin.com/in/ruthvik-suvarnakanti/" target="_blank"><i class="fab fa-linkedin-in"></i></a>
        <a class="social-icon" href="https://github.com/suvarnrk?tab=repositories" target="_blank"><i class="fab fa-github"></i></a>
      </div>
    </div>
    <br>
    <div class="text-primary" id="response"></div>
  </div>
</div>
```

Figure 3: Code of page content

The link with WAPH coursework will take you to the detailed coursework done by us in labs and recent hackathon.

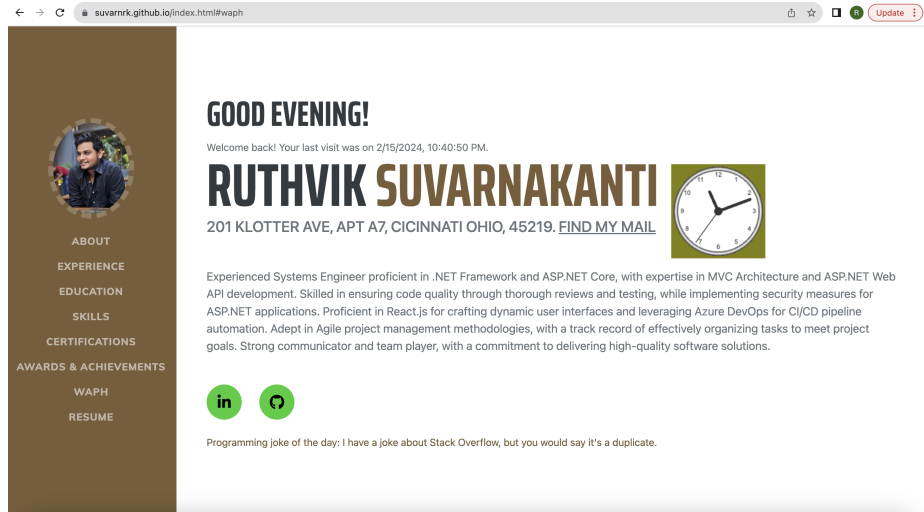


Figure 4: Portfolio View

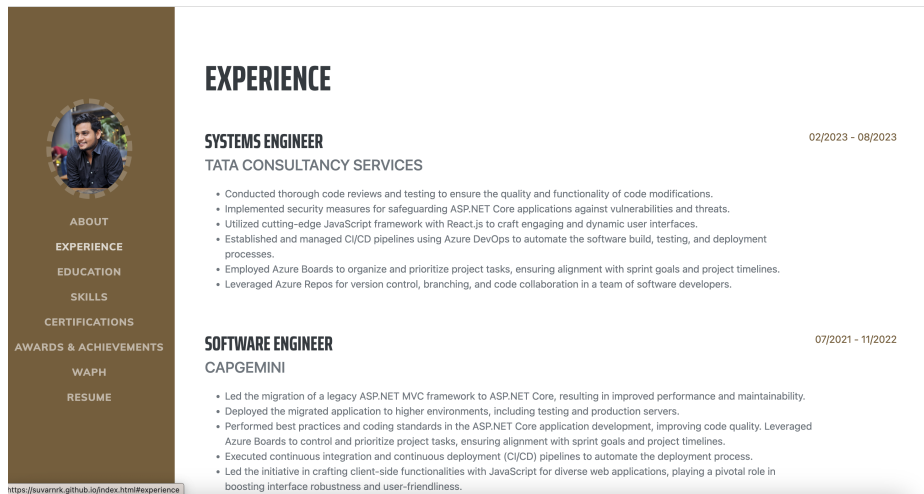


Figure 5: Portfolio View

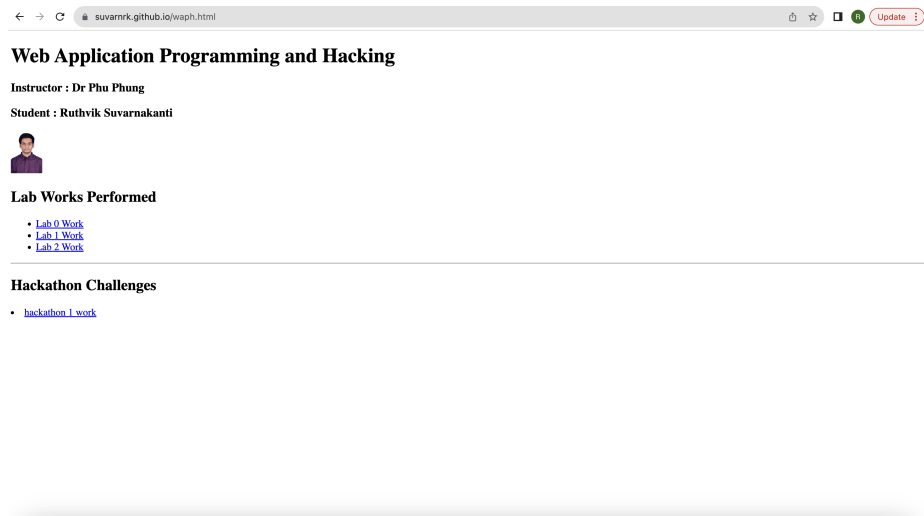


Figure 6: WAPH coursework

The portfolio now includes a Google Analytics page tracker, enabling the monitoring of traffic and statistics. This integration allows for the comprehensive analysis of website engagement and visitor behavior. By leveraging Google Analytics, valuable insights into browsing patterns and user interactions are obtained. This data facilitates optimization efforts to enhance the portfolio's performance and user experience. Through this tracking feature, I aim to better understand audience engagement and refine the portfolio accordingly.

```
<!-- Google tag for page tracker-->
<script async src="https://www.googletagmanager.com/gtag/js?id=G-736JEW5RXQ"></script>
<!-- Google tag (gtag.js) -->
<script async src="https://www.googletagmanager.com/gtag/js?id=G-Z88DWME3X0"></script>
<script>
  window.dataLayer = window.dataLayer || [];
  function gtag(){dataLayer.push(arguments);}
  gtag('js', new Date());

  gtag('config', 'G-Z88DWME3X0');
</script>
```

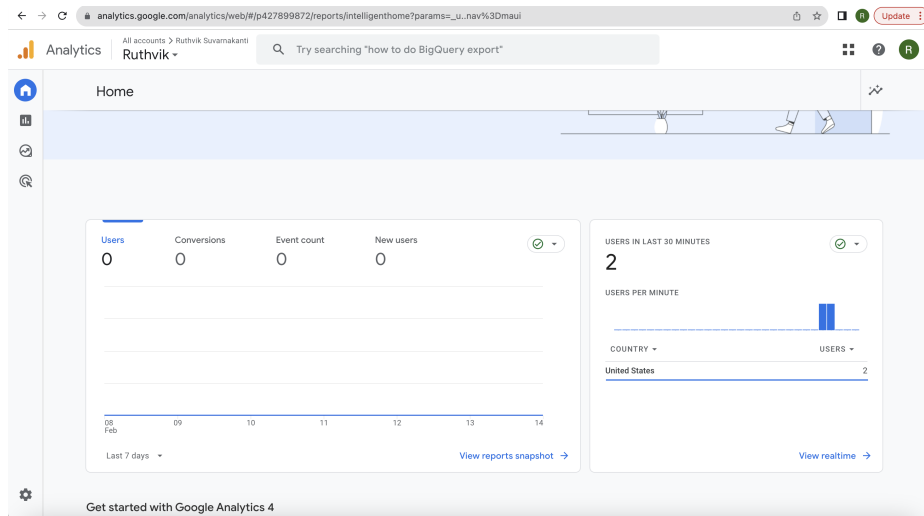
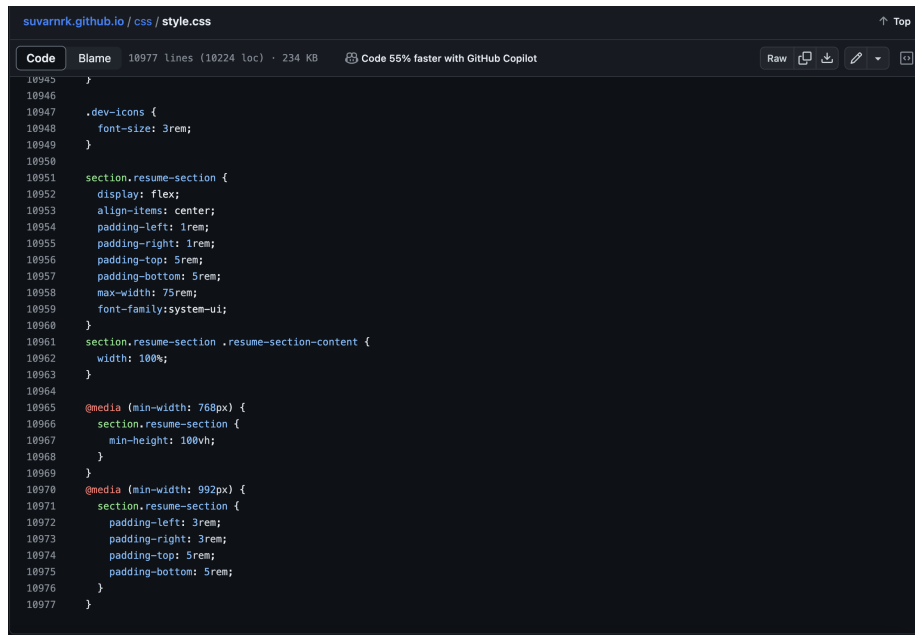


Figure 7: google page tracker

This portfolio is crafted using a combination of HTML, CSS, Bootstrap framework, JavaScript, and React library. These technologies work together to create a cohesive and dynamic user experience. HTML and CSS provide the foundational structure and styling, while Bootstrap ensures responsive design and layout consistency across devices. JavaScript adds interactivity and dynamic elements, enhancing user engagement. Integrating the React library further enhances the portfolio's functionality, allowing for efficient management of content and seamless navigation. Together, this tech stack forms the backbone of the portfolio, enabling the effective presentation of skills and experiences.

A screenshot of a GitHub repository interface. The top bar shows the repository name 'suvamrk.github.io / css / style.css' and a 'Top' link. Below the bar, there are tabs for 'Code', 'Blame', and 'Raw'. The 'Code' tab is active, displaying a CSS file. The code is for styling a resume section, including a font size of 3rem for icons and various padding and width settings for the resume section and its content. The code is line-numbered from 10945 to 10977. The interface also shows a 'Code 55% faster with GitHub Copilot' badge and icons for raw, copy, download, and edit.

```
10945 }
10946
10947 .dev-icons {
10948   font-size: 3rem;
10949 }
10950
10951 section.resume-section {
10952   display: flex;
10953   align-items: center;
10954   padding-left: 1rem;
10955   padding-right: 1rem;
10956   padding-top: 5rem;
10957   padding-bottom: 5rem;
10958   max-width: 75rem;
10959   font-family: system-ui;
10960 }
10961 section.resume-section .resume-section-content {
10962   width: 100%;
10963 }
10964
10965 @media (min-width: 768px) {
10966   section.resume-section {
10967     min-height: 100vh;
10968   }
10969 }
10970
10971 @media (min-width: 992px) {
10972   section.resume-section {
10973     padding-left: 3rem;
10974     padding-right: 3rem;
10975     padding-top: 5rem;
10976     padding-bottom: 5rem;
10977   }
10978 }
```

Figure 8: Resume section font styling

The integration of JQuery facilitated the incorporation of two public APIs into the portfolio: a random joke generator web service and a weather widget web service. Every minute, a new random joke is displayed, adding a touch of humor to the user experience.

<script>

```
// Define a function to fetch and display a programming joke
function displayJoke() {
  // Make a GET request to the joke API
  $.get("https://v2.jokeapi.dev/joke/Programming?type=single", function(result) {
    // Log the joke retrieved from the API
    console.log("Joke from the API: " + JSON.stringify(result));

    // Check if a joke is retrieved successfully
    if (result && result.joke) {
      // Display the programming joke on the webpage
      $("#response").text("Programming Joke of the Day: " + result.joke);
    } else {
      // If no joke is retrieved, display a message
    }
  });
}
```



```

        $("#response").text("Could not retrieve a joke at this time.");
    }
});
}

// Call the displayJoke function initially to show a joke
displayJoke();

// Set up an interval to call the displayJoke function every minute
setInterval(displayJoke, 60 * 1000);

\pagebreak

```

There is a weather widget code which displays the weather forecasting of Cincinnati.

```JS

```

<div class="weather-widget">
 <a class="weatherwidget-io" href="https://forecast7.com/en/39d10n84d51/cincinnati/"
 data-label_1="CINCINNATI" data-label_2="WEATHER" data-theme="original">
 CINCINNATI WEATHER

 <script>
 !function(d,s,id){
 var js,fjs=d.getElementsByTagName(s)[0];
 if(!d.getElementById(id)){
 js=d.createElement(s);
 js.id=id;
 js.src='https://weatherwidget.io/js/widget.min.js';
 fjs.parentNode.insertBefore(js,fjs);
 }
 }(document,'script','weatherwidget-io-js');
 </script>
</div>

```



Figure 9: weather widget

Additionally, code from Lab 2 has been incorporated, enhancing the portfolio with features such as a digital clock, analog clock, and functionality to show/hide email.

To enhance the portfolio's appeal, I integrated a custom greeting message feature using React. This functionality dynamically greets the user with "Good Morning," "Good Afternoon," or "Good Evening" based on the current time of day. By leveraging React, this personalized greeting adds a touch of interactivity and warmth to the user experience, fostering a more engaging and welcoming atmosphere.

```
<head>
<script src="https://unpkg.com/react@17/umd/react.development.js"></script>
<script src="https://unpkg.com/react-dom@17/umd/react-dom.development.js"></script>
</head>

<div id="greeting-root"></div>
<script src="greetings.js"></script>

const Greeting = () => {
 const hour = new Date().getHours();
 let greetingMessage;

 if (hour >= 5 && hour < 12) {
 greetingMessage = 'Good morning!';
 } else if (hour >= 12 && hour < 17) {
 greetingMessage = 'Good afternoon!';
 } else {
```

```
 greetingMessage = 'Good evening!';
 }

 return React.createElement('h2', null, greetingMessage);
};

ReactDOM.render(React.createElement(Greeting, null),
document.getElementById('greeting-root'));
```

JavaScript cookies play a crucial role in enhancing user experience by remembering visitors to the website. Upon their initial visit, a warm “Welcome to my portfolio” message is displayed, creating a friendly atmosphere. Subsequent visits trigger the display of a personalized greeting, such as “Welcome back to my portfolio” along with the current time, fostering a sense of familiarity and connection with the user. This thoughtful implementation ensures that returning visitors feel acknowledged and appreciated, contributing to a positive and memorable browsing experience.

```
<script>
<div id="greetingCookie"></div>
function setCookie(name, value, expiryDays) {
 const d = new Date();
 d.setTime(d.getTime() + (expiryDays*24*60*60*1000));
 let expires = "expires=" + d.toUTCString();
 document.cookie = name + "=" + value + ";" + expires + ";path=/";
}

function getCookie(name) {
 let cookieName = name + "=";
 let decodedCookie = decodeURIComponent(document.cookie);
 let ca = decodedCookie.split(';');
 for(let i = 0; i <ca.length; i++) {
 let c = ca[i];
 while (c.charAt(0) == ' ') {
 c = c.substring(1);
 }
 if (c.indexOf(cookieName) == 0) {
 return c.substring(cookieName.length, c.length);
 }
 }
 return "";
}

function welcomeUser() {
 const lastVisit = getCookie("lastVisit");
 const greetingElement = document.getElementById("greetingCookie");
 if (lastVisit) {
 greetingElement.innerHTML =
"Welcome back! Your last visit was on " + lastVisit + ".";
 } else {
 greetingElement.innerHTML = "Welcome to my portfolio!";
 }
 const now = new Date();
 setCookie("lastVisit", now.toLocaleString(), 365);
}
```

```
welcomeUser();
</script>
```

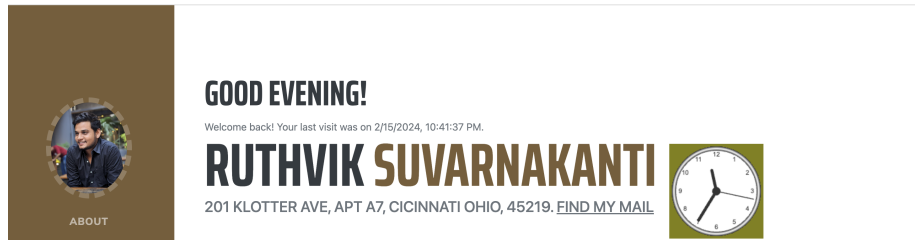


Figure 10: Utilizing cookies to remember the User