

# Sumeyye Bilgen

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## CAREER FOCUS

Driven Computer Engineering student with hands-on experience in AutoCAD electrical design and programming (C/C++, Python). Contributed to real-world residential projects approved by local authorities. Strong communicator with a practical, team-oriented mindset and a desire to grow through real engineering challenges.

## EDUCATION

**B.S. Computer Engineering** in Virginia Polytechnic Institute & State University (Virginia Tech)

Expected Graduation: May 2027

**Higher Secondary Certificate** in Celal Toraman Anatolian High School

June 2023

## SUMMARY OF SKILLS

**Languages:** Fluent in English and Turkish; beginning level Chinese and Korean

**Technical Skills:** AutoCAD electrical, C, C++, Python(intermediate), Git, MATLAB, Code composer studio

### Project Management & Leadership:

Strong leadership experience in managing academic and social projects

**Communication:** Strong written and verbal skills demonstrated through grading, team projects, and student organization leadership.

**Problem-Solving:** Analytical and critical thinking in resolving complex academic and social issues

## PROFESSIONAL EXPERIENCE

**Turkish Student Association – Virginia Tech**

Sept 2025 - Present

### Event Coordinator

- Assisting in planning and coordinating upcoming cultural and social events for members.
- Collaborating with the executive team to develop ideas for community engagement and event promotion.

**ANS Engineering - Didim, Turkey**

June 2025 - August 2025

### Intern

- Independently designed 2–3 floor twin villa electrical layouts using AutoCAD, including plans for sockets, switches, and lighting.
- Coordinated directly with local authorities; submitted and received official approval from the municipality for electrical projects.
- Supported engineers in preparing and verifying network, fiber, and TV cabling drawings.
- Participated in documentation and permitting processes, gaining insight into regulatory compliance and field standards.

**Virginia Tech**

Sept 2024 - May 2025

### Undergraduate Grading Assistant

- Graded assignments and supported coursework delivery in foundational engineering classes.
- Helped students understand technical content, contributing to an inclusive and supportive academic environment

**Virginia Tech Dining Services**

November 2023 - May 2024

### Cashier

- Maintained high levels of customer satisfaction through effective communication and transaction handling.
- Managed cash accurately during peak hours.

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## PROJECTS

### **Residential Electrical Design – AutoCAD Projects**

#### **ANS Engineering | Summer 2025 – Didim, Turkey**

- Supported the design and drafting of internal electrical systems for multi-story residential villas using AutoCAD.
- Produced circuit layouts, panelboard schematics, load calculations, and grounding system plans in line with local regulatory standards.
- Prepared complete documentation packages for permitting; multiple projects were reviewed and approved by the municipal authority.
- Gained exposure to the permitting process, residential electrical infrastructure, and compliance-driven design in a professional engineering setting.

### **Touhou Embedded Game – Microcontroller Project**

#### **ECE 2564 – Embedded Systems | Virginia Tech | Fall 2025**

- Designed and programmed an interactive shooting game on the MSP432 microcontroller platform using C.
- Implemented finite state machines (FSM), real-time joystick input, and LCD-based user interfaces within a non-blocking system architecture.
- Developed features including dynamic enemy patterns, health-based game logic, and modular game states (title, menu, gameplay, high scores).
- Applied structured programming principles and hardware abstraction techniques to manage embedded system complexity.

### **Pixel Monarch – Embedded Strategy Game**

#### **ECE 2564 – Embedded Systems | Virginia Tech | Fall 2025**

- Developed a decision-based kingdom management game using GPIO inputs and UART communication.
- Designed a multi-screen user interface rendered on LCD (menu, instructions, gameplay, game over) with full FSM control logic.
- Handled player interaction, crisis event resolution, and score tracking while adhering to embedded programming best practices.
- Ensured clean code structure through modular function design, avoidance of global variables, and strict non-blocking behavior.