Job Title: Computer Science and Robotics Teacher
Location: Roanoke Catholic School, Roanoke, VA
Resition Types Full Time 40 Month Contract

Position Type: Full-Time, 10-Month Contract

Grades: 6-12

# Job Description:

 Roanoke Catholic School is seeking a dedicated and innovative Computer Science and Robotics Teacher for grades 6-12. The ideal candidate will have a passion for STEM education and the ability to engage students in a dynamic learning environment. This position includes teaching AP Computer Science, introductory and advanced computer science courses, and robotics. The teacher will foster critical thinking, problem-solving, and creativity in students through hands-on projects and real-world applications.

#### Responsibilities:

- Develop and deliver engaging and rigorous lesson plans for middle and high school computer science and robotics courses, including AP Computer Science Principles and AP Computer Science A.
- Teach programming languages such as Java, Python, and block-based coding (Scratch, Blockly, etc.).
- Lead and support a robotics program, including participation in competitions such as FIRST Robotics or VEX Robotics.
- Integrate project-based learning, coding challenges, and real-world applications into instruction.
- Differentiate instruction to accommodate diverse learning styles and abilities.
- Incorporate ethical considerations and digital citizenship into computer science education.
- Utilize technology effectively to enhance student learning.
- Maintain accurate records of student progress and provide timely feedback.
- Collaborate with colleagues to integrate computer science and robotics concepts across disciplines.
- Sponsor or assist with extracurricular STEM-related clubs and activities, including Robotics.
- Instruct CAD-related lessons and activities, including the operation and demonstrated use of CNC machines, 3D printers, and similar equipment.

# **Qualifications:**

- Bachelor's degree (or higher) in Computer Science, Robotics, Engineering, Education, or a related field.
- Teaching certification (or willingness to obtain certification) preferred.
- Experience teaching AP Computer Science courses or willingness to undergo training.

- Strong knowledge of programming languages, algorithms, data structures, and robotics platforms.
- Experience with robotics kits (e.g., LEGO Mindstorms, VEX, Arduino, Raspberry Pi, etc.) preferred.
- Ability to create a positive and inclusive classroom environment.
- Excellent communication and organizational skills.
- Passion for inspiring students in STEM fields.
- Experience with CAD software (such as AutoCAD, Fusion 360, or SolidWorks) and the ability to teach design principles and manufacturing processes.

#### **Preferred Qualifications:**

- Experience coaching or mentoring robotics teams in competitions.
- Familiarity with computer science curriculum standards, such as CSTA and AP frameworks.
- Knowledge of cybersecurity, AI, or other emerging tech fields is a plus.
- Strong knowledge of programming languages, algorithms, data structures, and robotics platforms.
- Experience with robotics kits (e.g., LEGO Mindstorms, VEX, Arduino, Raspberry Pi, etc.) preferred.
- Ability to create a positive and inclusive classroom environment.
- Excellent communication and organizational skills.
- Passion for inspiring students in STEM fields.

### **Application Process:**

Interested candidates should submit a cover letter, resume, and three professional references to Jon Templeton (<a href="mailto:jtempleton@roanokecatholic.com">jtempleton@roanokecatholic.com</a>). Applications will be reviewed on a rolling basis until the position is filled.

Roanoke Catholic School is an equal-opportunity employer and seeks candidates who will support our mission of academic excellence and faith-based education.