## Faculty Member Contact Information

| Name | Dr. Igor Crk |
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| **Contact Info** | |
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| **Department** | Computer Science |

## 2 Unfunded URCA Assistant

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| | This position is **ONLY** open to students who have declared a major in this discipline. | **M** |
| | This project deals with social justice issues. | 💙 |
| | This project deals with sustainability (green) issues. | 🌿 |
| | This project deals with human health and wellness issues. | ➕ |
| | This project deals with community outreach. | ✋ |
| **X** | This mentor's project is interdisciplinary in nature. | I |

**Are you willing to work with students from outside of your discipline? If yes, which other disciplines?**

- Yes, Psychology, music

**How many hours per week will your student(s) be required to work in this position?**
(Minimum is 6 hours per week; typical is 9)

- 9 hours

**Will it be possible for your student(s) to earn course credit?**

- Yes-- CS495, independent study (3 credit hours)

**Location of research/creative activities:**

- SIUE School of Engineering

**Brief description of the nature of the research/creative activity?**

We will be using an EEG device to collect brain activity data for a variety of program comprehension (computer programming) and music sight-reading tasks. We hypothesize that prior musical training improves learning outcomes for early computer science learners and are looking to identify regions of the brain that are activated during each of the experimental tasks.

**Brief description of student responsibilities?**

An URCA assistant may work on experiment design, data collection (experiment software setup, electrode placement), and/or data analysis, depending on interest and ability.

**URCA Assistant positions are designed to provide students with *research or creative activities* experience. As such, there should be measurable, appropriate outcome goals. What exactly should your student(s) have learned by the end of this experience?**

Student(s) may learn about electroencephalography, interpretation of measurable brain activity, experiment design, and analysis.

**Requirements of Students**

**If the position(s) require students to be available at certain times each week (as opposed to them being able to set their own hours) please indicate all required days and times:**

- Availability to be physically present in the lab during some weekdays is a requirement. Times are flexible.

**If the location of the research/creative activities involves off campus work, must students provide their own transportation?**

- N/A

**Must students have taken any prerequisite classes? Please list classes and preferred grades:**

- Statistics and experiment design in any discipline would be a plus, but not required.

**Other requirements or notes to applicants:**

- N/A