The Hiring Committee,
Computer Science Department,
Folsom Lake College.
Re: Position of Computer Science Instructor 2/1/2024

Dear Hiring Committee,

I am very pleased to apply for the position of Computer Science Instructor at Folsom Lake College.

As a previous adjunct faculty member of the computer science department at Folsom Lake, I have pleasant memories of my students, and of associations with colleagues at the department, and at the college. As a resident of Folsom living in the vicinity of Folsom Lake College, I am honored to be deeply rooted in Folsom, and connected with the local community of students, families, schools and with professionals in the local industry. As a founding mentor of the Folsom Cordova School District ACM chapter, I serve local high school students with academic and career guidance, and help connect them with computer science programs in community colleges and with ACM events and programs in the Sacramento area. Proud to say that our Folsom high school students won the NASA global space app competition!

I currently serve as full time tenured professor of computer information science at Sacramento City College. I am experienced in OEI rubric based online course design, curriculum and content development in existing and emerging areas of computer science, and in teaching courses in all levels of programming and in data science. I have designed and currently teach the first Python offering of our data science course. I am the co program coordinator for our Artificial Intelligence program and have developed curriculum in Python and Data Science and designed pathways in Machine Learning. I am part of a UC Berkeley based cohort of community college instructors collaborating on designing articulatable data science courses. I am also a member of the ACM2Y initiative for curriculum development for two-year programs.

Mentoring adjunct faculty and other full-time faculty in course design and development has been a rewarding activity for me. I have worked on a bi weekly basis with three adjunct faculty in the past year to guide them on course construction and design. Their products have received excellent reviews. I have also like wise mentored a full-time faculty member with course development and alignment.

Creating a transformational educational experience for all levels of learners is a professional goal for me. Towards that end, I work on creating multi modal learning spaces that enrich student experience and connect the classroom to industry and to higher learning. Student demographics, their professional needs and aspirations, the rapidly evolving field of computer science, and the changing modalities and technologies for learning, constantly challenge me and dynamically define my teaching methods, teaching products and philosophies.

I view my role as a facilitator whose goal is to create a community of learners that is actively engaged with the material, can connect prior experiences to construct new competencies, attain mastery by being rewarded for effort, and learn to transfer practices in the classroom to the real world of industry. I use a blend of *constructivism, behaviorism, experiential and active learning* in an *inclusive* and *equitable* environment, and have created custom materials and assessments using *backward design principles* to

reach these goals. I am excited to work in a community college that offers the opportunity to serve students of diverse academic and life goals, and to create cutting edge programs and certificates that will help fulfil student needs.

In addition to earning a PhD, I also have a teaching certificate in high school computer science and math and am a UC Berkeley Fellow in Undergraduate STEM education. I continue to upgrade my teaching toolkit, and have completed a one-year teaching certification from ACUE (American Council of University Educators), and hold several certifications in best practices in online course design and online teaching. I have also participated in a yearlong national faculty development program in Quantum Information Science Education. To help create state of the art data science and machine learning pathways and certificates, I have participated in Data Science and Machine Learning pedagogy workshops at UC Berkeley and Harvard Institute of Computational Sciences and earned a Microsoft Certification in Azure AI fundamentals.

Through my position as advisor to the Folsom Cordova Unified School District ACM chapter, faculty advisor of the student chapter of the Los Rios, ACM, and the vice-chair of the professional chapter of the ACM, I have had the opportunity to work and create bridges from high school through community college and four-year educational establishments, and to create programs and platforms for a diverse population of students to build a wide range of technical and soft skills and connect to developments and opportunities in industry. Our annual Future World Symposiums on Artificial Intelligence attract speakers who are distinguished experts from academia and industry. I also regularly plan and organize in person and online hackathons, distinguished speaker events, tech talks and career events that draw industry presence like IBM. We have been ambassadors of the Stanford Women in Data Science program and our women students created teams that participated the competition. Students across the board, specially our underserved population, have benefited from participating in these events and gained tremendous leadership experience.

I have also mentored students of underrepresented in industry projects in data science and artificial intelligence and continue to support and motivate them inside and outside the classroom. These programs have helped these minority student groups grow and succeed in securing internships in leading companies and in admissions to leading colleges like UCLA, UC Berkeley etc.

I am committed to create a successful learning experience for all my students especially first-generation students, women, students of color, students from underrepresented minorities, and those students who need equitable distribution of resources. To achieve this, I

- *Increase cultural competency by embracing ongoing learning and self-reflection by undertaking challenges like 21 day racial equity habit building.*
- *Model a growth mindset for myself and set these expectations for my students.*
- *Design and use equity and diversity focused syllabi for all my courses.*
- *Deepen regular and effective contact in the in-person an online classroom and*
    - *create student bonds to peers, mentors, technical and soft skill building channels,*
    - *promote social networks that embrace diversity and inclusion,*
    - *help remove imposter syndrome,*
    - *generate a sense of belonging in the college and in computer science.*
- *Better prepare our underserved students to transfer to four-year programs*

I am excited to hear of the amazing efforts and vision of the computer science department at Folsom Lake. I truly believe that the programs that are being developed at FLC will play a leading role in providing state of the art education to our diverse student population across the district.

I would be very happy to be part of this journey and to serve our students!

Sincerely,

Abida Mukarram

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