

## SDHXCS Enrichment Classes (才艺课)

<b>Subject (科目):</b> Please select one of the categories	<b>Computer Science</b>		
<b>Course Name</b> (课程名称):	<b>American Computer Science League Competition</b> (计算机基础竞赛)		
<b>Teacher Name</b> (教师姓名)	Cao, Paul (曹英俊)	<b>Phone</b>	(440) 320 – 2818
		<b>email</b>	cs4fun.sd@gmail.com
<b>Teacher's background and brief</b> (教师及其简介):	<p>Dr. Paul Cao, the principal instructor at CS4FUN, teaches computer science at UC San Diego. He has more than 15 years of teaching experience in computer science programs at liberal arts colleges and research institutions. He and his CS4FUN team are committed to unlocking students' potential in coding through formal computer science training, which includes developing computational thinking in a structured and fun-filled environment and building a solid foundation in practical coding skills with Python.</p> <p>圣地亚哥华夏中文学校电脑编程班的主讲教师是 Paul Cao, 他目前任教于加州大学圣地亚哥分校 (UCSD) 计算机科学与工程系, 他在杜克大学计算机工程专业获得博士学位。Paul 在本科和 K-12 教育领域拥有丰富的教学经验。他在 UCSD 负责主讲本科课程, 如计算机编程 I 和 II、计算机结构和高级数据结构。他在美国计算机科学教育界, 尤其 K-12 教育研究领域享有较高声誉。他的学生遍布硅谷各大公司和顶尖大学的研究生院。</p>		
<b>Course brief and Description</b> (课程简述):	<p>This class is designed to prepare students of various ages to compete at the annual ACSL competitions (acsl.org). Students aged from 8 to 18 qualify to compete and they will compete based on their age group: elementary division (3<sup>rd</sup> – 6<sup>th</sup> graders), junior division (7<sup>th</sup> – 9<sup>th</sup> graders), and senior divisions (10<sup>th</sup> grade and above). ACSL topics are foundational to computer science and this class will prepare our students for more serious computing related competitions such as USACO (United States Computing Olympiad).</p> <p>本课程主要侧重于培训 8 岁到 18 岁的学生参加每年一度的 ACSL 计算机竞赛。学生会分成小学组, 初中组和高中组。ACSL 竞赛包括计算机的基础知识, 会对学生的计算机基础有所帮助, 也有助于参加以后更高端的竞赛, 例如美国信息科学竞赛</p>		
<b>Course Objectives</b> (课程目标):	<ul style="list-style-type: none"> <li>- Computer number systems (binary, octal, hex)</li> <li>- Prefix/Infix/Postfix expressions</li> <li>- Boolean algebra</li> <li>- Basic graph theory</li> <li>- Basic data structures (stack, queue)</li> <li>- Circuit design</li> <li>- Recursion</li> </ul>		

	- Basic coding in a programming language (python)			
<b>Pre-requisite/Student Ages</b> (先决要求/学生年龄要求):	8 years old to 18 years old 8 岁到 18 岁			
<b>Student Evaluation / Presentation</b> (评分方法 (演出、比赛、展示等)):	The evaluations will be based on regular homework assignments and final projects. 根据学生完成与否定期的家庭作业和最终项目给予期末评估。			
<b>Maximum Number of Students to be Enrolled</b> (最多招生人数限制):	<b>Min: 5    Max: 15</b>			
<b>Course Fee</b> (报名费 / 学费):	<b>Registration &amp; material fee</b>	<b>\$760/Year</b>	<b>Course Time &amp; Location</b>	<b>Sundays 1:30pm – 3:00pm OR A weekday remote (these two sessions will be repeats and students can pick which one to attend. Zoom session is offered if needed)</b>

