使用EmguCV的VideoCapture 类调用摄像头，并使用CascadeClassifier类进行人脸识别（初始化该类时使用OpenCV预定义的haarcascade\_frontalface\_alt2.xml定义识别特征），相关代码如下：

VideoCapture capture = new VideoCapture(); //create a camera captue

CascadeClassifier tmpCascade = new CascadeClassifier("haarcascade\_frontalface\_alt2.xml");

private void button5\_Click(object sender, EventArgs e)

{

//两秒一次进行图像获取及识别

Timer tmpTimer = new Timer();

tmpTimer.Interval = 2000;

tmpTimer.Tick += new EventHandler(tmpTimer\_Tick);

tmpTimer.Start();

}

void tmpTimer\_Tick(object sender, EventArgs e)

{

using (Mat nextFrame = capture.QueryFrame())

{

if (nextFrame != null)

{

// there's only one channel (greyscale), hence the zero index

//var faces = nextFrame.DetectHaarCascade(haar)[0];

Image<Gray, byte> grayframe = nextFrame.ToImage<Gray, byte>();

var faces = tmpCascade.DetectMultiScale(grayframe, 1.4, 4, new Size(nextFrame.Width / 8, nextFrame.Height / 8));

Image<Bgr, byte> tmpimg = nextFrame.ToImage<Bgr,byte>();

foreach (var face in faces)

{

tmpimg.Draw(face, new Bgr(0, double.MaxValue, 0), 3);

}

imageBox1.Image = tmpimg;

}

}

}