



Pratya Nuankaew &lt;nuankaew.p@gmail.com&gt;

---

## 8th International Conference on Smart Computing and Informatics : Submission (479) has been created.

1 message

---

**Microsoft CMT** <noreply@msr-cmt.org>  
To: pratya.nu@up.ac.th

Fri, Mar 13, 2026 at 7:05 PM

Hello,

The following submission has been created.

Track Name: SCI2026

Paper ID: 479

Paper Title: User-Centered UX/UI Design and Evaluation of a Computer Vision-Based Text Neck Screening System Using CVA and HTA Angles with NDI Assessment

**Abstract:**

This study proposes an artificial intelligence based system for screening and monitoring the risk of Text Neck Syndrome using continuous posture analysis from video streams. The system estimates the Craniovertebral Angle CVA and Head Tilt Angle HTA in real time from CCTV recordings and integrates these objective posture indicators with the Neck Disability Index NDI questionnaire to better reflect functional impairment and symptom severity. From the video input a deep learning based pose estimation module detects key anatomical landmarks relevant to head and cervical alignment then derives CVA and HTA values and summarizes them as risk indicators over time. The outputs are presented through an interactive dashboard that supports longitudinal tracking of individual and group level behavior including frequency duration and trend patterns of forward head posture. By providing timely feedback and evidence based risk summaries the proposed approach is expected to support early detection and preventive intervention thereby reducing the likelihood of neck related musculoskeletal problems associated with prolonged digital device use particularly in adolescent populations.

Created on: Fri, 13 Mar 2026 12:04:49 GMT

Last Modified: Fri, 13 Mar 2026 12:04:49 GMT

**Authors:**

- [pratya.nu@up.ac.th](mailto:pratya.nu@up.ac.th) (Primary)

Secondary Subject Areas: Not Entered

**Submission Files:**

d.pdf (317 Kb, Fri, 13 Mar 2026 12:04:46 GMT)

Submission Questions Response: Not Entered

Thanks,  
CMT team.

Please do not reply to this email as it was generated from an email account that is not monitored.

To stop receiving conference emails, you can check the 'Do not send me conference email' box from your User Profile.

Microsoft respects your privacy. To learn more, please read our [Privacy Statement](#).

Microsoft Corporation  
One [Microsoft Way](#)  
[Redmond, WA 98052](#)