Algorithm 1: Handover adaption

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for $i \leftarrow 1$ **to** $length(trajectory)$ **do** *Adaption loop*

    allowedSpeed¡-MaxSpeed(trajectory[i]);

    c=trajectory[i];

    p=trajectory[i-1];

    n=trajectory[i+1];

    /*speed overrun*/

    if $Speed(c) \geq 1.7 * allowedSpeed$ **then**

        cDist=Distance(c);

        pDist=Distance(p);

        nDist=Distance(n);

        nominalDist=allowedSpeed*Duration(c);

        SetSpeed(c,allowedSpeed);

        if $p==NULL \&\& n!=NULL$ **then**

            pDist=pDist+(cDist-nominalDist);

            SetSpeed(prev,pDist/Duration(p));

        else if $p!=NULL \&\& p!=NULL$ **then**

            nDist=nDist+(cDist-nominalDist);

            SetSpeed(n,nDist/Duration(n));

        else

            nTempDist=nDist+(cDist-nominalDist)/2;

            pTempDist=pDist+(cDist-nominalDist)/2;

            if $nTempDist/Duration(n) \gg nominalSpeed$ **then**

                nTempDist=nDist;

                pTempDist=pDist+(cDist-nominalDist)

            else if $pTempDist/Duration(p) \gg nominalSpeed$ **then**

                nTempDist=nDist+(cDist-nominalDist);

                pTempDist=nDist;

            SetSpeed(n,nTempDist/Duration(n));

            SetSpeed(p,pTempDist/Duration(p));

end