**Algorithm 1:** Handover adaption

```
for i ← 1 to length(trajectory) do  Adaption loop
    allowedSpeed_i-MaxSpeed(trajectory[i]);
    c=trajectory[i];
    p=trajectory[i-1];
    n=trajectory[i+1];
    /*speed overrun*/
    if Speed(c)≥ 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)≫nominalSpeed then
                nTempDist=nDist;
                pTempDist=pDist+(cDist-nominalDist);
            else if pTempDist/Duration(p)≫nominalSpeed then
                nTempDist=nDist+(cDist-nominalDist);
                pTempDist=nDist;
            SetSpeed(n,nTempDist/Duration(n));
            SetSpeed(p,pTempDist/Duration(p));
end
```

**Algorithm 2:** Handover adaption

```
for i ← 1 to length(trajectory) do  Adaption loop
    allowedSpeed_i-MaxSpeed(trajectory[i]);
    c=trajectory[i];
    p=trajectory[i-1];
    n=trajectory[i+1];
    /*speed overrun*/
    if Speed(c)≥ 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)≫nominalSpeed then
                nTempDist=nDist; pTempDist=pDist+(cDist-nominalDist);
            else if pTempDist/Duration(p)≫nominalSpeed then
                nTempDist=nDist+(cDist-nominalDist);
                pTempDist=nDist;
            SetSpeed(n,nTempDist/Duration(n));
            SetSpeed(p,pTempDist/Duration(p));
end
```